

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

62.23

LIBRARY
RECEIVED
★ FEB 3 - 1954 ★
U. S. Department of Agriculture

Geo. J. Ball

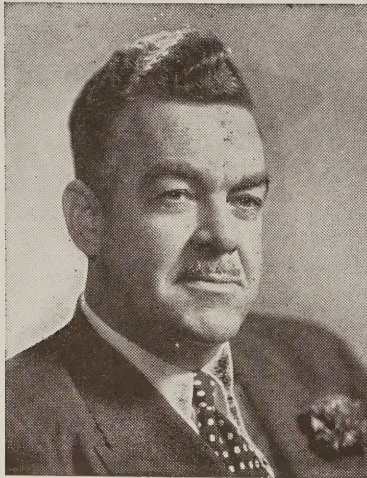
INC.

WEST CHICAGO, ILLINOIS
U. S. A.



PLANTS and BULBS

1953-1954

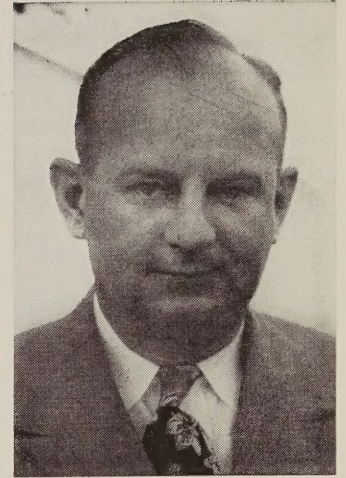


BOB CHASE
Plant Department

TO OUR CUSTOMERS:

This is the second annual edition of our Plant and Bulb catalog. The response from you to our first edition was so favorable that we now plan to revise and print our catalog annually.

One of the difficulties in preparing a catalog of plant and bulb items months ahead of delivery of the items listed revolves around the impossibility of establishing prices. Prices charged for many of the items in this catalog are not established until just before shipping time. Prices shown in this catalog were in effect at the time the catalog went to press, but many of these prices will obviously be subject to change for shipments made this coming fall and winter. If you are interested in current prices for items listed in this catalog, a letter from you will give you the latest information that we have.



CLARENCE BAHNFLETH
Bulb Department

Bob Chase and Clarence Bahnfleth, managers respectively of our Plant and Bulb Departments, whose pictures appear on this page, are the men responsible for their departments. When you have occasion to write either department, why not write to either Bob or Clarence personally? For the same reason you enjoy letters written to YOU, they enjoy correspondence addressed to them. The better you get to know them and the better they get to know you, the better job we can all do of supplying you with "all the Best" in plants and bulbs.

George K. Ball
President

PLANT and BULB CATALOG—1953-'54—BUSINESS TERMS

DISCOUNT ON CASH ORDERS. All bulbs 2%; plants are net.

DISCOUNT ON CHARGE ORDERS. All bulbs, 2% 10 days; plants net. If this is your first order, it should be signed with some **individual's name** in writing. Payment should accompany all orders unless credit has been established. C.O.D. shipments 50% in advance.

All prices listed in this catalog are subject to change without notice, and are F.O.B. shipping point unless stated otherwise.

IMPORTANT. Make checks or money orders payable to **Geo. J. Ball, Inc., WEST Chicago, Illinois.** Not responsible for currency sent in the mail.

Business Hours (Holidays excepted) are 8 to 12 and 1 to 5 Monday thru Friday; 9 to 12 Saturday. Our phone number is West Chicago 299.

Our business is with Florists only. We do not sell at retail.

Shortages. All items are offered subject to crop failures or shortages.

No complaints of any kind will be given consideration unless made in writing to us within 10 days from receipt of shipment.

All plants and bulbs are shipped collect and are in perfect condition when they are accepted by the transportation company. If there is any damage enroute from being broken, heated or frozen, **CALL THE AGENT OF THE DELIVERING CARRIER** to inspect the shipment upon arrival, marking on express receipt or bill of lading the condition of the package and amount of damage, etc. **YOU MUST FILE CLAIM,** as our responsibility ceases when the carrier accepts shipment. We cannot be responsible for the safe arrival of your plants or bulbs.

LIMITATION OF WARRANTY. Geo. J. Ball, Inc., warrants to the extent of the purchase price that seeds, plants, or bulbs sold are as described on the container within recognized tolerances. Seller gives no other or further warranty, express or implied.

GENERAL INDEX

For **PLANTS**, see Pages 1-15—**BULBS**, Pages 16-31—**SUPPLIES**, Pages 32-33

	Page		Page		Page		Page
Amaryllis	24	Cloth	32	Gloxinias	27	Petunias	9
Anemone	24	Crocus	22	Hoseboye	33	Poinsettias	10
Asters	10	Culture, Bulb	30	Hyacinths		Primulas	11
Azaleas	8	Cuprinol	32	Holland	21, 23	Ranunculus	24
Begonias		Cyclamen	10	French Roman	26	Roses	1
Fibrous Rooted	12	Daffodils		Hydrangeas	9	Saran	32
Melior	9	American	18	Insecticides	32	Scilla	22
Norwegian	9	Holland	21, 23	Iris		Snapdragons	12
Tuberous Rooted	27	French	26	Holland	22	Soil Shredder	32
Caladiums	26	Dahlias	28	American	18	Tulips	
Callas	24	Delphinium	10	Ixia	22	Holland	19, 23
Cannas	26	Freesias	25	Labels	32	American	18
Carnation Pack	32	Fuchsias	9	Lilium Candidum	26	Variety Recommendations	
Carnations	5	Fumicover	32	Lily Bulbs	16	(bulbs)	29
Chionodoxa	22	Galanthus	22	Muscari	22	Visqueen	32
Chrysanthemums	13	Geranium	11	Narcissi, see Daffodils			
Cineraria	11	Gladiolus	25	Peonies	28		

Roses for Pot Forcing

Delivery: December—January—February

F.O.B. West Chicago, Plus Packing at Cost. Shipments Travel at Purchaser's Risk.

The varieties we list here are made up of the best large flowering and small flowering floribundas and polyanthas for forcing as flowering pot plants.

We find the demand for these most active for Mother's Day sales, altho in some localities our customers enjoy a fine Easter business with them. The XXX grade is the best value.

Write us for complete cultural information.



Triomphe D'Orleans, one of the best varieties for Easter and Mother's Day.

STANDARD VARIETIES

Ball Pink. Light rose pink; early.
Triomphe D'Orleans. Red; early.
Garnette. Garnet-red; early.
Margo Koster. Orange early.
Magna Charta. Bright pink; early.
Gloria Mundi. Orange; late.
Dagmar Spaeth. White; late.
Dick Koster. Red; early.

	Per 10	Per Case 120	Per Case 220
XXX	\$6.90	\$72.50	\$132.50
XX	Per 10 \$5.90	Per Case 160 \$72.50	
X	Per 10 \$3.90	Per Case 250 \$72.50	
Sold in units of 10 plants, only.			

PATENTED VARIETIES XXX

	Per 10	20-100 Each
Carol Amling (New), Pink, Pat. No. 1126	\$10.00	\$0.87½
Crimson Rosette. Pat. No. 901....	10.00	.87½
Pink Rosette. Pat. No. 902.....	10.00	.87½
Irene of Denmark. White. Pat. No. 889	9.00	.75

XXX ROSE COLLECTION

60	Triomphe D'Orleans
20	Garnette
20	Gloria Mundi
20	Magna Charta
120	Case (Collection)
	\$75.00
Price includes packing charge.	

Any price changes will be adjusted at delivery time.

Greenhouse Bench Roses

Started Budded Rose Plants for Delivery Winter 1953, Spring 1954

Aristocrat. (Pat. No. 903). A new light pink sport of Pink Delight. It is definitely a better producer than the original, with equal length of stem, and has a pleasing blend of pink colors.

Better Times. The best all-round money-maker today. Still the leader in all markets and the most generally grown variety. Too well known and accepted to require further description.

Demure. (Pat. No. 1065) Cecile Brunner pink, especially fine for corsages. Good keeper, good shipper. Heavy petalage.

Garnette. Crisp, double, small, open Sweetheart flowers of garnet red. The foliage is dark green and always attractive. Flowers keep for a very long time after cutting and are particularly good for corsages, boutonnieres and miniature arrangements. This variety is gaining rapidly in wholesale and retail favor. Many florists have kept full-open flowers in perfect condition for over ten days. Production is increased if plants are allowed to become bushy and tall. Also excellent as a pot forcer.

Golden Rapture. Rich yellow shading to a light yellow. Heavy producer.

Golden Scepter (Plant Pat. No. 910). A new golden yellow cut flower with an excellent bud and open flower, long, strong shoots, and rich shiny dark green foliage. A long keeper. Golden Scepter has equal production with the Briarcliff varieties and does not produce light-colored buds as do some of the other yellows. It starts quickly and freely after being cut or pinched to produce many long-stemmed blooms. It will make money for the specialist as well as for the mass producer in all seasons of the year.

Happiness. (Pat. No. 911) A good deep red. Good petalage;

good shipper. Very long stems. Should be planted a little closer than Better Times.

Hildegarde. (Plant Pat. No. 799). A very uniform good pink Briarcliff. This has a suffusion of yellow and does not blue. It keeps a clear shade in all seasons. We recommend this variety as the best of the Briarcliffs and as very superior to the old type. A stronger grower, and does not produce bullheads. Very popular with growers who have it.

Lily White. (Pat. No. 912) Sport of Starlite. The bud is pointed; flower is just a bit shorter, and the production is the same. Petal substance is heavier than Starlite. A much better Rose.

Orange Delight (Plant Pat. No. 874). A different color. A rich fragrance. A worth-while novelty that keeps well. Gorgeous rich burnt-orange buds and blooms with large, shiny, dark holly-like foliage. Both buds and blooms are very attractive and keep well after cutting. With their rich fragrance they create their own demand wherever seen. Orange Delight produces freely at all seasons of the year. An excellent variety to plant to have more colors available for your Rose customers.

Peter's Briarcliff. The best of the deep pink forms of Briarcliff. Very popular. Selected carefully for uniformity in color. Vigorous, free grower.

Pink Garnette. Sport of Garnette with a good clean, clear, deep pink color. Very double.

Pinocchio (Plant Pat. No. 484). The improved Sweetheart and most popular of the light pink cluster Roses. Lovely, soft shade of pink suffused with yellow. Very prolific production.

Snow White. (Plant Pat. 348). A clear, firm white with dark green foliage and excellent form.

Tawny Gold. (Pat. No. 950) Orange-yellow bud, opening to a clear yellow with ruffled petals. Very fragrant. Long-lasting.

Minimum order 50 of a variety, write for prices.

Ball's Outstanding Garden Roses

Also suitable for potting

PATENTED VARIETIES

HYBRID TEAS

Variety and Description	Plant Pat. No.	*Retail Price
American Flagship. Very dark red.....	676	\$1.75
Applause. Large, rich red, fragrant blooms.....	829	2.00
Apricot Queen.	464	1.50
Babe Ruth. Salmon pink.....	996	2.00
Bravo. Large, cardinal red.....	983	2.25
Bright Eyes. Yellow	880	1.50
Buccaneer. Yellow	PAF	2.75
California. Ruddy gold	449	1.50
California Centennial. Medium red.....	953	2.00
Capistrano. Cherry-red buds; rose pink flowers....	922	2.25
Charlotte Armstrong. Red buds; large, fragrant cerise blooms	455	2.00
Chrysler Imperial. Deep red.....	PAF	3.00
Debonair. Primrose yellow.....	677	1.75
Diamond Jubilee. Fragrant; buff yellow.....	824	2.00

Variety and Description	Plant Pat. No.	*Retail Price
Douglas MacArthur. Delft-rose blooms.....	581	\$1.75
Eclipse. Clear yellow. Rich green foliage.....	172	1.75
First Love. Two-tone pink.....	921	2.25
Fandango. Rich, deep scarlet.....	894	2.00
Forty-niner. Bicolored petals; inside oriental red, outside yellow	792	2.25
Fred Howard. AARS. Yellow, tipped pink.....	1006	2.50
Golden Scepter. Large, golden yellow.....	910	2.50
Good News. Silvery pink, long-stemmed.....	426	1.75
Grand Duchesse Charlotte. Rich claret color.....	774	1.75
Heart's Desire. Crimson	501	1.75
Helen Traubel. AARS. Sparkling pink to luminous apricot. Large buds.....	1028	2.75
Horace McFarland. Deep red. Dark foliage.....	730	1.75
K. T. Marshall. Deep rose-pink flushed yellow....	607	1.75

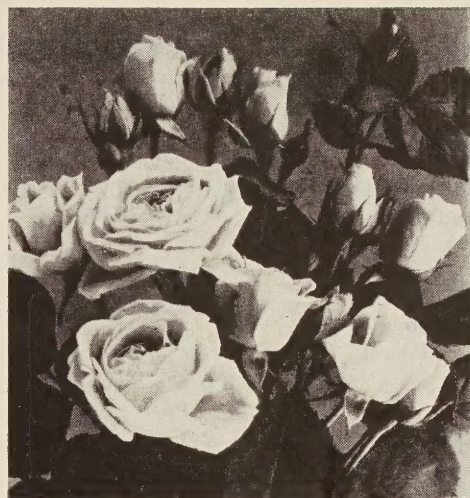
Garden Roses

PATENTED VARIETIES, Continued

Variety and Description	Plant Pat. No.	*Retail Price
Mandalay. Largest of all yellow Roses.....	775	\$2.00
McGredy's Sunset. Orange-yellow overlaid with warm salmon-flame	317	1.75
Mirandy. Large, garnet-red blooms.....	632	2.00
Mission Bells. Large, fragrant, salmon-pink buds and flowers	923	2.25
Mme. Chiang Kai-shek. Lemon yellow.....	644	1.75
New Yorker. A truly red Rose.....	823	2.00
Nocturne. Large, fragrant, cardinal-red.....	713	2.00
Peace. Large blooms, shades of yellow, gold and ivory edged with pink.....	591	2.50
Pearl Harbor. Pink	637	1.50
Remembrance. Two-tone pink.....	PAF	2.00
Rex Anderson. Ivory-white, double flowers.....	335	1.75
Rubaiyat. Large, double, rose red.....	758	1.75
San Fernando. Large double, scarlet.....	785	1.75
Santa Anita. Pink	539	1.50
Show Girl. Rich deep pink, long buds.....	646	1.75
Sleigh Bells. White	1004	2.00
Sutter's Gold. Long, yellow buds shaded orange and red	885	2.25
Sweet Sixteen. Salmon pink, yellow base.....	631	1.75
Taffeta. Buds carmine-rose; blooms multicolored rose and pink.....	716	1.75
Tallyho. Rose-pink inside, deep rose outside.....	828	2.00
Texas Centennial. Brick-red blooms with gold shading to rich pink.....	162	1.50
The Chief. Flame color. Long stems.....	456	1.75
Tom Brennehan. Carmine.....	986	2.00
Will Rogers. Red	256	1.50

FLORIBUNDAS

Variety and Description	Plant Pat. No.	*Retail Price
Betty Prior. Red buds opening to shell-pink.....	340	\$1.50
Chatter. Semi-double, carmine red.....	739	1.50
Connie Mack. Crimson	1062	2.00
Dream Girl. Pink	643	2.25
Fashion. Luminous coral-pink overlaid with gold	789	2.00
Geranium Red. Buds dark oxblood-red, opening to bright geranium red.....	811	1.50
Goldilocks. Clusters of golden yellow blooms.....	672	1.50
Imp. Cecile Brunner. Pink.....	851	1.50
Lavender Pinocchio. A true lavender.....	947	2.00
Lillibet. Salmon pink	PAF	* *
Ma Perkins. Pink	PAF	2.25
Ming Toy. Fragrant, deep rose pink.....	900	1.50
Mojave. Orange	PAF	* *
Pink Bountiful. Soft pink.....	601	1.50
Pinkie. Small slender pink buds opening fully to double blooms	712	1.75
Pinocchio. Small, semi-double, salmon pink.....	484	1.50
Red Pinocchio. Velvety red, semi-double.....	812	1.50
Valentine. Red	1029	* *
Vogue. AARS. Glowing cherry-coral.....	926	2.25
White Pinocchio.	1010	1.50
World's Fair. Semi-double, deep crimson.....	362	1.50
Yellow Pinocchio. Apricot-yellow, semi-double....	992	1.50



Our roses are being grown especially for YOU, our florist customers.

CLIMBERS

Variety and Description	Plant Pat. No.	*Retail Price
Aloha. Coral pink, double.....	948	\$2.50
California Climber. Two-tone	PAF	2.00
Cl. Charlotte Armstrong.	523	* *
Cl. Crimson Glory. Vigorous climber.....	736	2.00
Cl. Floradora. Scarlet red. Hardy.....	PAF	2.00
Cl. Forty-niner.	1094	* *
Cl. Golden Rapture.	508	1.75
Cl. Peace. Large flowers in shades of yellow, gold and ivory edged with pink.....	932	2.50
Cl. Picture.	524	2.00
Cl. Pinkie. Small pink buds opening fully to clusters of large blooms.....	1076	2.75
Cl. Summer Snow. Huge clusters of white double flowers	400	2.00
Cl. Texas Centennial. Brick-red with gold shading to rich pink.....	565	2.00
High Noon. Bright yellow pillar Rose.....	704	2.25
King Midas. Lovely clear yellow.....	586	2.00

AARS—All-America Award, 1952.

*This is the established MINIMUM retail price set by patent holder for bare root, dormant plants. For your cost, refer to table in box below.

**At the time this catalog went to press, prices were not yet established.

Prices Patented Varieties

RETAIL PRICE (Per Variety)	Wholesale Price (Per Variety)		
	10 Plants Each	20-90 Plants Each	100-250 Plants Each
\$3.00	\$1.80	\$1.50	\$1.40
2.75	1.50	1.37½	1.30
2.50	1.40	1.25	1.20
2.25	1.25	1.12½	1.05
2.00	1.10	1.00	.95
1.75	1.00	.87½	.80
1.5090	.75	.70

Prices are "per variety" on all Patent Varieties regardless of total number of bushes on your order. Minimum order 10 of any one variety. Sold only in units of 10.

Any price changes will be adjusted at delivery time.

Garden Roses

STANDARD VARIETIES

RED

Ami Quinard
Crimson Glory
Better Times
Christopher Stone
E. G. Hill
Etoile de Hollande
McGredy's Scarlet
Poinsettia
Red Hoover
Red Radiance
Red Talisman
Rouge Mallerin

PINK

Angels Mateau
Briarcliff
Editor McFarland
Los Angeles
J. Otto Thillow
Peters Briarcliff
Picture
Pink Dawn
Pink Radiance
President Macia
The Doctor

WHITE

Caledonia
Frau Karl Druschki
K. A. Viktoria

YELLOW

Golden Charm
Golden Dawn
Golden Ophelia
Golden Rapture
Johanna Hill
McGredy's Yellow
Soeur Therese

TWO-TONE

Autumn
Betty Uprichard
Countess Vandal
Margaret McGredy
Pres. Hoover
Talisman

FLORIBUNDAS

Cecile Brunner
Else Poulsen
Floradora
Golden Salmon
Gruss an Aachen
Imp. Lafayette
Mrs. R. M. Finch
Permanent Wave
Red Ripples
Rosenelfe

CLIMBERS

RED

Blaze
Cl. Etoile de Hollande
Cl. Poinsettia
Cl. Red Radiance
Paul's Scarlet
Bonfire

PINK

Cl. Pink Radiance
Dorothy Perkins
Dr. W. Van Fleet
New Dawn

YELLOW

Cl. Golden Sastago
Cl. Yel. Talisman
Silver Moon

WHITE

Cl. Frau Karl Druschki
Cl. K. A. Victoria
Cl. Caledonia

TWO-TONE

Cl. Pres. Hoover
Cl. Talisman

Prices Standard Varieties, each:

No. 1		No. 1 1/2	
10 to 50.....	\$0.60	10 to 50.....	\$0.50
50 to 100.....	.58	50 to 100.....	.48
100 or more.....	.55	100 or more.....	.45

Sold in units of 10 plants, only.

Standard Varieties may be grouped in order to take advantage of the quantity rate.

Garden Rose Collections

STANDARD ROSE COLLECTION No. 1

150 No. 1 Grade for \$82.50

30 Ami Quinard	10 Briarcliff
20 Christopher Stone	10 Soeur Therese
20 Poinsettia	10 K. A. Victoria
30 Picture	20 Paul's Scarlet Climber

GENERAL ROSE COLLECTION No. 2

150 Assorted Patented and Standards for \$145.00

20 Ami Quinard	10 Remembrance
20 Chrysler Imperial	10 Buccaneer
10 Will Rogers	10 Mojave
10 Charlotte Armstrong	10 White Pinocchio
20 Editor McFarland	10 California Climber
10 Babe Ruth	10 Paul's Scarlet Climber

ROSE COLLECTION No. 3

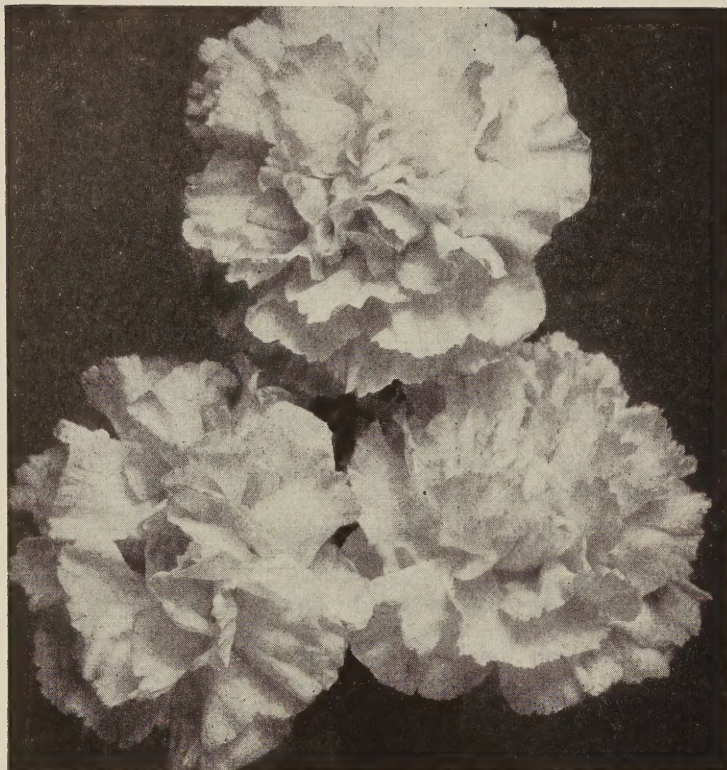
300 Very Select Patented Hybrid Teas,
Floribundas, and Climbers for \$325.00

10 Applause	10 Chatter
10 Blanche Mallerin	10 Crown of Jewels
30 Chrysler Imperial	10 Goldilocks
20 Douglas MacArthur	10 Lillibet
10 Forty-niner	20 Mojave
10 Golden Sceptor	20 Pink Rosette
10 Mirandy	10 White Pinocchio
30 Peace	10 Aloha
10 Remembrance	10 California Climber
10 Show Girl	10 Floradora
10 Sleigh Bells	10 High Noon
10 Sweet Sixteen	

The above collections are offered as a result of a survey we have made which definitely shows a preference trend. Due to the fact that at this writing Rose bushes still have a full season's

growth ahead of them, it may be necessary to do some substituting on collections of this sort. When necessary, be assured we will select plants of equal value in the same color range.

Any Price Changes Will Be Adjusted at Delivery Time



If you want quality in your Carnations, demand quality in your cuttings.

WHITE

Achilles. A large, clear white; petals deeply serrated. Larger than Jupiter and more productive. Fast, early producer on long, strong stems. Free come-back in winter. A good all-year, white.

Juno. A medium sized, flat, well-formed white flower; very full center; free come-back in winter. This variety is good from early fall to late spring. A good keeper and shipper—in some trials, better than Olivette.

RED

Titan. An intense crimson red, not quite as tall as Vulcan. Gets into production fast. Very full flower, outstanding flower substance. Consistently high production.

Siren. A scarlet Carnation which combines heavy production with fast come-back and uniform cropping, on stems of medium length. This variety grows to about the same height as Aphrodite and its production is equal to that of Apollo. Siren will out-produce Neptune. It should find a very important place among the varieties now available in this color class.

VARIEGATED

Cassandra. A yellow and pink variegated; very similar to Orion, but flowers are larger and stems stronger. Variety never splits; shows excellent flower substance; an outstanding keeper.

Yoder Bros.

1952-'53 INTRODUCTIONS

You can feel completely free to order these Carnations in quantity as they have been flowered in our own greenhouses and have proved their superiority over standard varieties. But if you're not convinced that these are the best buy in Carnations, try some alongside your standard varieties for comparison.

The demand for these varieties has been heavy—get your order in now to be sure of the quantities and varieties you want. Shipped September thru June. F.O.B. Barberton, Ohio. Minimum order, 50 cuttings of a variety.

PINK

Cupid. Color a true Briarcliff pink; size medium. Very heavy producer, at its best December thru April. Flower is small in summer, but color remains excellent. A good keeper. This is not a large Carnation, but the production of this variety makes it a true bread-and-butter variety.

Pandora. A dark pink with sufficient suffusion of salmon to make it an exceptionally beautiful color under artificial light. This variety will fade during the heat of summer, but is really a new color for December thru April. Good average production; fine flower substance.

Eros. A light pink color, similar to that of Aphrodite, except that it is deeper in the summer and early fall. Vigorous, heavy growth; long, strong stems. Early flowering and fast come-back. Large flowers with good average production. Some splitting in early fall, but disappears as soon as night temperatures are maintained. This variety is fine for late spring, summer and early fall.

PRICES above 8 new varieties:

Per 100		Per 100	
50 of a variety	\$15.00	500-950 of a variety	\$12.75
100-250 of a variety	14.25	1000-2450 of a variety	12.00
300-450 of a variety	13.50	2500-up of a variety....	11.00

Quantity prices apply to any one variety only.

Any Price Changes Will Be Adjusted at Delivery Time.

New Carnations

PREVIOUS INTRODUCTIONS

WHITE

Jupiter. A large, strong stemmed white.

Aurora. Another exceptionally large, white flower. Does well in late spring and early fall.

Adonis. A winter white. Satisfactory flower quality and good production. This variety is competition for Olivette.

PINK

Apollo. An outstanding salmon pink, larger than Netta. A good summer flower, well suited to all areas of the country.

Aphrodite. A clear light pink; outside petals bleach a little in late spring and early fall, but do not burn. A good, early producer with an early comeback, it is at its best in areas of relatively high light intensity.

Diana. Light pink; a good producer.

Venus. A show variety. Extra large, beautiful, long stemmed, salmon pink flower.

ROSE

Minerva. An unusual deep scarlet pink. Good summer flower—fades in very high light intensity, but fades uniformly with no white edge. Heavy break-back; fine keeper.

RED-SCARLET

Ceres. Beautiful King Cardinal color and exceptionally high production. Early, with heavy comeback.

Neptune. Scarlet (color resembles that of Wm. Sim); a free breaker, fine stretch. A very satisfactory variety.

MAROON

Vulcan. Excellent keeper, good comeback. Best maroon.

YELLOW

Midas. A good yellow Carnation. Production very satisfactory. Strongly recommended where Miller's Yellow is a problem.

VARIEGATED

Orion. Color resembles that of Glowing Ember. An excellent grower and producer.

Saturn. A beautiful warm bronze variegated; excellent under artificial light. Promises to become a very popular novelty.



Plant on your right is Midas. The rooted cutting was benched direct June 22. The shorter plant was banded as a rooted cutting April 4, benched from band on June 22. Photo taken August 25.

PRICES above 14 varieties:

	Per 100	Per 100
50 of a variety	\$13.50	500-950 of a variety \$11.45
100-250 of a variety	12.80	1000-2450 of a variety 10.80
300-450 of a variety	12.15	2500 and up of a variety 10.10

Quantity prices apply to any one variety only.

NOTES ON CARNATIONS

Most Carnations are still either banded or set out 3 x 3 in. to nursery beds, then benched in June or early July. A few are still set out to the field from late May till mid-July, but losses from disease are fast eliminating this practice—plus the back-breaking work involved.

New and promising, especially for retail growers, is **direct-benching with single pinch**. It is **by far** the least work, produces as many or more flowers over the year as you get from benching a banded or "nursery bed" plant, and with just as good or better quality. The only joker is that with single pinch, you are apt to get a heavy peak cut, then for a month or so very little. Also, in order to get into flower at desirable periods, it means benching the cuttings early in May—a period when most growers still want the cut from their old plants. Retail growers can bench Carnation cuttings direct after March Snaps, Stocks, or Mums.

So, as usual, we compromise—and from it will come schedules that will permit direct benching of **most** of the crop, and a reasonable **steady** production thru the year rather than heavy peaks. The schedules at right show how our own Carnation range will be handled in '53.

As with any single pinch crop, the first crop must be cut to a visible break—a shoot that is already started. If cut lower, second crop will come much later. One-third of the area to

each of the three schedules. Use only varieties that come back rapidly from a pinch. See BALL RED BOOK, page 86.

Band Cuttings (3 x 3 Veneer)	Bench Cuttings	Pinch Once only	Cut first Crop	Cut Second Crop	Remarks
April 1	By May 15	May 1	Aug. to mid-Sept.	Jan.-Feb.	Go light on red. Re- pinch 1/2 of this lot.
NO	Bench cuttings direct on May 15	June 15	Late Aug. thru Oct.	Mar. 1 May 15	Go light on red. Re- pinch 1/2 of this lot.
NO	Bench direct June 15	July 15	Nov.-Dec.	Apr.-May- June	Heavier on red.

Notes:

1. To avoid some of the heavy August cut from the first lot, half of the plants can be pinched a second time—about June 1. Part of the second group might also be re-pinched.

2. Any or all of the three groups may be banded or set out to nursery beds before benching if the old plants are still making money for you—but that means more work, slower growth.

Azalea Collections for Forcing

Azaleas are gaining in popularity as a pot plant. They are fairly easy to bring into flower, long-lasting, and profitable. You should have an assortment for your customers.

COLLECTION No. 1

50 plants, 5 each of the following 10 varieties:

Coral Bells. Dainty coral pink; semi-double.

Hexe. Deep crimson; semi-double dwarf.

Hinodegiri. Carmine red. Hardy.

Orange Coral Bells. Soft coral red.

Rival. Double salmon rose.

Rose Pericat. Hose-in-hose type. Light pink.

Salmon Beauty. Salmon pink. Hose-in-hose type.

Sensation. Deep pink, hose-in-hose type.

Snow. Pure white hose-in-hose type.

Sweetheart Supreme. Fine pink. Resembles Sweetheart Rose when opening.

50 Kurume Azaleas, size 6-8 (Collection)\$42.50

COLLECTION No. 2

25 plants, 5 each of the following 5 varieties:

Coral Bells. Dainty coral pink; semi-double.

Hexe. Deep crimson; semi-double dwarf.

Snow. Pure white hose-in-hose type.

Sweetheart Supreme. Fine pink. Resembles Sweetheart Rose when opening.

Rose Pericat. Hose-in-hose type. Light pink.

25 Kurume Azaleas, size 8-10 (Collection)\$25.00

COLLECTION No. 3

10 **Coral Bells** (6-8). Dainty coral pink; semi-double.

5 **Snow** (6-8). Pure white hose-in-hose type.

5 **Vervaeana** (8-10). Double, large rosy salmon.

10 **Mme. Petrick** (8-10). Christmas flowering rose.

10 **Triomphe** (8-10). Double red with purple sheen.

10 **Jean Haerens** (8-10). Double, large dark rose.

50 Grafted Indica and Kurume Azaleas (Collection) \$82.75



Our flowering trial of Azaleas.

COLLECTION No. 4

10 **Albert & Elizabeth.** Double white with pink border.

5 **Eric Schame.** Early salmon rose with blush.

10 **Jean Haerens.** Double, large dark rose.

10 **Mme. Petrick.** Christmas flowering rose.

5 **Perle de Swynaarde.** Best double white.

5 **Vervaeana.** Double, large rosy salmon.

5 **Violacea.** Deep purplish violet.

50 Grafted Indicas size 8-10 (Collection)\$100.00

All collections F.O.B. West Chicago plus 5% packing charge on express shipments. Be sure to order by collection number.

SEPARATE VARIETIES

INDICAS—GRAFTED

Albert & Elizabeth. Double white with pink border.

Chimes. Brilliant red. Early.

Eric Schame. Early salmon rose with blush.

Ernest Thiers. Semi-double, bold crimson.

Ideal. Christmas flowering variegated.

Jean Haerens. Double, large dark rose.

Madame Petrick. Christmas flowering rose.

Miss Cottage Gardens. Deep red. Early.

Niobe. Late, double white.

Paul Schame. Early double salmon red.

Perle de Swynaarde. Best double white. Early.

Simon Mardner. Early, beautiful double rose.

Triomphe. Double red with purple sheen.

Vervaeana. Double, large rosy salmon.

Vervaeana Alba. Large double, pure white.

Violacea. Deep purplish violet.

KURUMES

Coral Bells. Dainty coral pink; semi-double.

Hexe. Deep crimson; semi-double dwarf.

Hinodegiri. Carmine red. Hardy.

Marjorie Ann. Rose pink.

Rival. Double salmon rose.

Rose Pericat. Hose-in-hose type. Light pink.

Salmon Beauty. Salmon pink. Hose-in-hose type.

Sensation. Deep pink, hose-in-hose pericat.

Snow. Pure white hose-in-hose type.

Sweetheart Supreme. Fine pink. Resembles Sweetheart Rose when opening.

	Each		Each
6 to 8 in.....	\$1.65	10 to 12 in.....	\$2.50
8 to 10 in.....	2.00	12 to 14 in.	3.00

	Each		Each
4 to 6 in.....	\$.65	8 to 10 in.....	\$1.00
6 to 8 in.....	.85	10 to 12 in.....	1.50

Minimum total order 25 plants, 5 of any one variety or size. F.O.B. West Chicago. Add 10% for December and January storage, 20% for February storage. Packing charge 5% on express shipments.

Any Price Changes Will Be Adjusted at Delivery Time.

Small Plants

All the 2 1/4-in. stock listed below is grown in Ball Better Bands and shipped in our "Ball-Pak" or shipped out of 2 1/4 inch pots. F.O.B. Shipping Point.

ALL-DOUBLE PETUNIAS

2 1/4-In.

December thru April

Gaiety. Dwarf and compact with flowers blotched rose and white.
Allegro. Medium to large, fully double flowers of clear, bright salmon are carried on fairly dwarf plants.
Sonata. Extra large, fully double, pure white flowers.
Nocturne. Semi-double, deep Elk's Pride purple.
Rose of Canada. Fully double, bright medium rose flowers about 3 inches across are freely produced on compact, bushy plants.
Canadian All-Double Mixture. A well-balanced mixture.
Assorted.
\$12.00 per 100, **\$100.00** per 1000. Minimum order 100 plants.

MELIOR BEGONIAS

2 1/4-In.

May, June, July Delivery

Melior Improved **Lady Mac** **Marjorie Gibbs**
\$40.00 per 100, **\$350.00** per 1000. **45c** each in lots of 50 or less. 250 or more at 1000 rate. Minimum order 25 plants.

NORWEGIAN TYPE BEGONIAS

2 1/4-In.

Shipment from April 15 till supply is exhausted.

These Norwegian varieties are larger flowered with a much deeper pink color than the Meliors. They can be grown about 5 degrees cooler than our Christmas Begonias.

Tove. Light rose; early.
Karoline. Late, dark rose.
Solbachen. Dark rose; best for Christmas.
Dark Solbachen.
Skovane. New variety from Sweden.
Red Solfheim. New variety from Sweden.
\$45.00 per 100, **\$400.00** per 1000. 250 at 1000 rate. Please order in multiples of 50. Express F.O.B. New York.
We offer a **Collection of 50 plants**, assorted from the above varieties, for **\$25.00**.

FUCHSIAS

Delivery October to April 1

NEW 1952 INTRODUCTIONS	R.C. Per 100	2 1/4 In. Per 100
Hollydale. Double, lavender pink.....	\$7.50	\$15.00
Winston Churchill. Double, deep violet.....	7.50	15.00

STANDARD VARIETIES

Little Beauty. Red sepals, purple corolla (Bell), dwarf	5.00	12.00
Lord Byron. Red sepals, rich dark corolla, dwarf	5.00	10.00
Black Prince. Carmine or pink sepals and corolla. Tall	5.00	10.00
Pride of Orion-Double. Red sepals, large white corolla. Tall	5.00	10.00

F.O.B. Shipping Point. Minimum order 100 of a variety.

Picturing the cut flower possibilities of All-Double Petunias for retail growers.



DORMANT HYDRANGEAS

Shipped in plenty of time for Easter or Mother's Day forcing. When ordering, please specify for which holiday they are wanted. F.O.B. Pittsburgh.

* Strafford. Dark pink.	Hamburg. Carmine.
* Europa. Salmon pink.	Altoona. Clear pink.
* Rosabelle. Rose pink.	Regula. White.

Mereville. Light red.

*These varieties are recommended for bluing.

Each	Each
3" Special pot, 1 br..... \$.35	5", 2 br..... \$.55
3" Special pot, 2 br..... .45	5", 3 br..... .65
3" Special pot, 3 br..... .55	5", 4 br..... .75
3" Special pot, 4 br..... .60	5", 5 br..... .90

Kuhnert. Rose pink.	Gertrude Glahn. Dark rose.
Each	Each
3" Special pot, 1 br..... \$.30	5", 3 br..... \$.60
3" Special pot, 2 br..... .40	5", 4 br..... .70
3" Special pot, 3 br..... .50	5", 5 br..... .80
3" Special pot, 4 br..... .55	5" or 6", 6 br..... .90
5", 2 br..... .50	5" or 6", 7-10 br..... 1.00

HYDRANGEA



SMALL PLANTS, Continued

ASTERS

Lighted 2¼-In. Plants for June Flowering
March 1 to May 15 Delivery

Pink Ball (New). Long stemmed, fully double flowers of soft shell pink.
Quite wilt-resistant.

White Ball. A fine resistant white.

Ball Deep Rose. Long stemmed, bright deep rose. Very popular.

Ball Deep Purple. Rich bright purple; excellent stem.

Royal Azure-Blue. A fine commercial cut flower variety.

Assorted.

\$9.00 per 100; \$80.00 per 1000. Minimum order 100; 25 of a variety.

POINSETTIAS

2¼-In.

August-September-October
Delivery

	Per 100	Per 1000
Barbara Ecke Sup.	\$25.00	—
Indianapolis Red	21.00	\$200.00
Ecke's New White	21.00	200.00
Imp. Albert Ecke	19.50	185.00
Albert Ecke	19.50	185.00
Ruth Ecke	17.00	160.00
Oak Leaf	17.00	160.00
Pink	17.00	160.00

F.O.B. Shipping Point.
Minimum order 100 plants.

CYCLAMEN

2¼-In.

April-June

\$22.00 per 100; \$200.00 per 1000.
Minimum order 100.

3-In.

June-July

\$36.00 per 100, \$350.00 per 1000.
Minimum order 50.

4-In.

August

\$70.00 per 100. Minimum order 25.
Packing at cost.

DELPHINIUM

Giant Pacific Hybrids

2¼-In. Late March-Early June Delivery

Galahad. White.

Guinevere. Lavender.

Summer Skies. Light blue.

Blue Bird. Mid-blue.

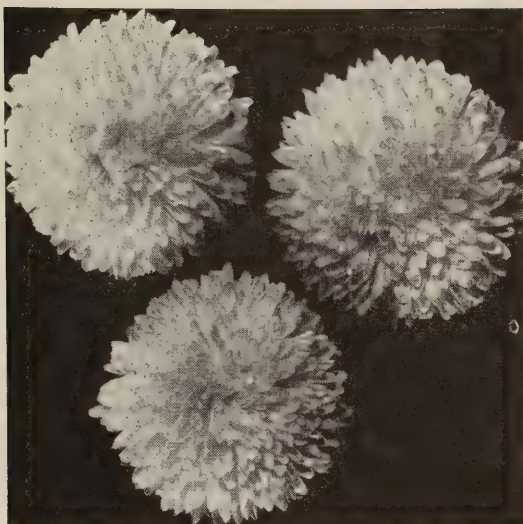
King Arthur. Deep violet blue.

\$12.00 per 100; \$100.00 per 1000. Minimum order 100 plants.

Astolat. Pale blush pink shades with dark bees.

\$15.00 per 100; \$125.00 per 1000.

Minimum order 100 plants.



ASTER



POINSETTIA



Cyclamen growing is a specialized job. Special conditions of moisture, temperature, and soil must be closely watched or the 16-18 month's time required to mature a plant will be wasted. Our Ball Red Book devotes a chapter to Cyclamen growing.



DELPHINIUM

SMALL PLANTS, Continued

GERANIUMS

2¼-In.

Delivery August thru Spring

RED

Better Times. Cerise.
Imp. Ricard. Bright red.
Olympic Red. Scarlet red.
Pride of Camden. Dark red.
Radio Red. Brilliant red.
Red Fiat. Bright red.
Red Barney.

SALMON PINK

Madam Landry. Bright salmon.
Pink Fiat. Salmon pink.
Salmon Supreme. Salmon pink.

WHITE

Madam Buchner. White.
Madonna. White.

Prices all above 2¼'s: \$125.00 per 1000.

Enchantress Fiat. Appleblossom pink. \$150.00 per 1000.
Minimum order 100 of a variety. F.O.B. Shipping Point.

Rooted and Unrooted Cuttings

LIGHT PINK

Enchantress Fiat. Appleblossom pink.

Red Fiat. Bright red.

SALMON PINK

Madam Landry. Bright salmon.
Pink Fiat. Salmon pink.
Salmon Supreme. Salmon pink.

RED

Better Times. Cerise.
Imp. Ricard. Bright red.
Olympic Red. Scarlet red.
Pride of Camden. Dark red.
Radio Red. Brilliant red.

WHITE

Madam Buchner. White.
Madonna. White.

Write for prices. Minimum order 500, 100 of a variety. Order in multiples of 100. 1500 can be shipped at a minimum air freight charge—please specify way to ship: air express, air freight, or railway express. F.O.B. San Diego, Los Angeles, and Santa Barbara.



CINERARIA SITER'S RAINBOW STRAIN



PRIMULA OBCONICA

2¼ inch plants ready from June thru December. Order now for delivery when you need them.

PRIMULA OBCONICA

2¼-In.

June-December Delivery

Fasbenders Red. An outstandingly fine, extra large flowered deep crimson red.

Muellers Berlin Rose (Muellers Rosea). Soft medium rose.

Sky-Blue (Coerulea). Clear mid-blue.

White. Rather tall growth.

\$10.00 per 100, \$90.00 per 1000. Minimum order 100 plants.

PRIMULA MALACOIDES

2¼-In.

Late September thru January

Glory of Riverside Imp. An excellent variety with beautiful salmon rose flowers.

White Giant. Pure white; large flowers and heavy stems.

Brilliance Imp. Flowers open lavender—turn to dark, velvety red on compact plants of medium height.

\$10.00 per 100, \$90.00 per 1000. Minimum order 100 plants.

CINERARIAS

2¼-In.

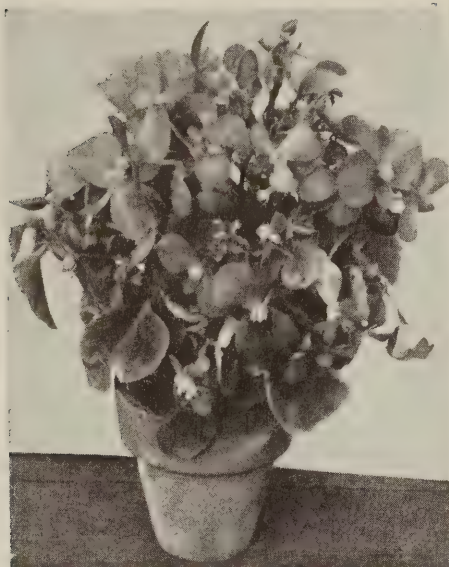
September thru January

Assorted, Siter's and Cremer's Strains

\$10.00 per 100, \$90.00 per 1000

Minimum order 100 plants.

Any Price Changes will be adjusted at delivery time.



Begonias make very nice small pot plants.

SMALL PLANTS, Continued

BEGONIAS

(Fibrous Rooted)

2¼-In. Available December to June

Adeline. Free flowering bright pink; dwarf.

Ball Deep Rose. Deep rosy red during winter and spring, changing to luminous pink during warm weather. Dwarf.

Luminosa Compacta. Dwarf. Popular scarlet-red.

Ball Red. Dwarf. Medium flowers of bright scarlet.

Indian Maid. Intermediate. Bronze-leaved scarlet.

Carmen. Intermediate. Bright rose-pink flowers, bronze leaves.

Snowbank. Dwarf. Large, glistening white flowers.

Assorted.

\$12.00 per 100; \$100.00 per 1000. 250 at 1000 rate.

Minimum order 100; 25 of a variety.

SNAPS

2¼-In. Available August thru March

PINK and ROSE

Rosanna (Ball Hyb. No. 9). Strong, clean-growing, heavy-producing deep rose. Early.

Christmas Cheer. HYBRID. Rose-pink. (Available till Dec. 1.)

Pensive. HYBRID (New—Yoder Bros.). Flowers just after Christmas Cheer. Dark pink.

Whirlaway. HYBRID (New—Yoder Bros.). Medium early light pink with yellow lip. Good spike.

Crusader. HYBRID (New—Yoder Bros.). Good stem, long spike. Midseason, silvery rose pink.

Christina. HYBRID. Medium light pink.

Pink Ice (New Ball Hyb. No. 31—formerly Exp. Hyb. No. 77X). A bright medium rose with nearly white lips. A clean, firm grower with outstanding flower spikes. Early flowering and very attractive.

Hercules (New Ball Hyb. No. 21—formerly Exp. Hyb. No. 78X). Extra long spikes of closely set, medium pink florets are carried on long, hard stems with clean, grass-free foliage. Midseason.

RED

Navajo (Ball Hyb. No. 8). Our best red.

YELLOW

Golden Spike (Ball Hyb. No. 1). Golden yellow for mid-winter.

War Admiral. HYBRID (New—Yoder Bros.). Outstanding vigor, uniform spike formation. A good yellow.

WHITE

Snowman (Ball Hyb. No. 5). Pure white with no suggestion of ivory.

Margaret. Clean ivory-white; very productive. The most popular variety on our entire list.

LAVENDER

Lavender Lady (New Ball Hyb. No. 71—formerly Exp. Hyb. No. 95X.) A deep, rosy lavender shade with excellent spikes and stems. This is unquestionably the finest lavender Snap we've ever seen. For late winter and spring.

BRONZE

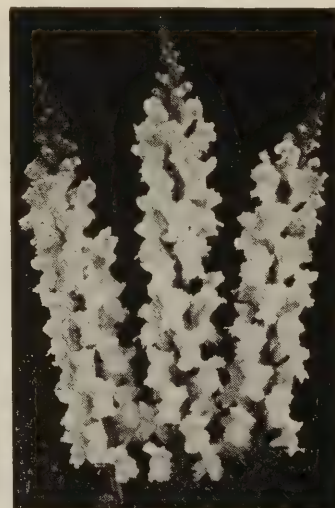
Gallant Fox. HYBRID (New—Yoder Bros.). Deep orange bronze. Close-set florets; a little earlier than our former offering, Barbara.

Prices all Snapdragon varieties:

\$8.00 per 100, \$65.00 per 1000. 250 at 1000 rate.

Minimum order 100; 25 of a variety.

GOLDEN SPIKE
(Ball Yellow Hyb. No. 1)



Any Price Changes Will Be Adjusted at Delivery Time.

Garden (HARDY) Mums

The Hardy or Garden type Mums are becoming increasingly important, not only for resale to home gardeners, but also as a source of outdoor cut flower material for retail growers. Following is our very complete list of varieties available as rooted cuttings for this spring and summer delivery. Because of last-minute shortages, it is important that you place your order with us as far ahead of delivery date as possible. Notice that our minimum order is 500 cuttings, and individual varieties must be ordered in multiples of 50 cuttings each.



ORLOMA
New apricot bronze decorative.

NEW DEPETRIS VARIETIES

- Orloma.** Luminous apricot bronze decorative. Bushy cushion habit of growth; very free and durable. Sept. 15.
Mme. Cadillac. Mulberry wine red, solid large Pompon type. Strong, bushy, and compact habit. Sept. 20.
Dwight Douglas. Dazzling golden yellow decorative. Medium tall and very free and excellent for cutting. Oct. 5.
Orsona. Reddish bronze, decorative. Very good bushy growth. Sept. 20.
Orpheus. Brilliant Roman red, large Pompon with perfect full form. Strong, long stems with perfect spray formation. Vigorous, clean, upright growth. Oct. 10.

- Miguel.** Radiant raspberry red decorative with good keeping qualities. An excellent cut flower. Oct. 8.
Genista. Very early solid yellow Pompon of good size. Dwarf, bushy habit. Sept. 12.

Prices above 7 new varieties, each: 50 cuttings for \$7.50; 100-250, \$14.50 per 100; 300-450, \$14.00 per 100; 500-950, \$13.50 per 100; 1000-2450, \$13.00 per 100; 2500 up, \$12.50 per 100.

COMPLETE LIST

Types are abbreviated as follows. Pom.—Pompon; Dec.—Decorative; Sgl.—Single. Size of flower is indicated by S—Small; M—Medium; L—Large. P—Indicates varieties suitable for

pots. C—Indicates varieties suitable for cutting.
No orders for less than 50 rooted cuttings of a variety accepted.
Minimum total order, 500 cuttings.

WHITE

Name and Description	Flowering Date	Price 50 Only
C Candlelight. Cream-white, yellow center. Dec. Med.	Sept. 15	\$3.00
P White Cushion. White, shaded pink at center. Cushion. Short.....	Sept. 15	3.00
C D. D. Ahrens. Pure white. Dec. Tall.....	Sept. 10	3.00
P Paper White. White. Dec. Med.....	Sept. 10	4.00
PC Chris Columbus. White with yellow buds. Large Dec. Tall	Sept. 15	3.50
Calcite. White with pale yellow center. Heavy bloomer. Dec. Med.....	Sept. 15	3.00
Drifted Snow. A mound of double white flowers, shaded yellow. Dec. Med.....	Sept. 15	3.00
P Polar Ice. Pure white, double, 3 in. flowers. L. Dec. Med.....	Sept. 15	3.50
C White Bounty. White with cream center. Button. Tall	Sept. 15	3.50
C White Tower. Cream. L. Pom. Tall.....	Sept. 15	3.50
C White Wonder. Ball-shaped white. L. Pom. Med.	Sept. 25	3.00
Shalimar (H). Cream. L. Pom. Tall.....	Sept. 25	4.50
C White Cloud. White with delicate pink shading. Dec. Tall.....	Sept. 25	3.50

Name and Description	Flowering Date	Price 50 Only
Pepita. Eggshell white, darker center. Button Med.	Sept. 28	\$3.50
Snow Fall. White, slight cream center. Dec. Med.	Oct. 1	3.50
Ermine. Large, wide petaled ivory white. L. Dec. Med.	Oct. 1	4.00
Spindrift. (New). White. L. Dec. Med.....	Oct. 1	6.25
C Winterset (H). Large white Dec. Med.....	Oct. 1	3.25
Avalanche. Cream. L. Dec. Tall.....	Oct. 5	3.25
Horizon. White. Pom. Med.....	Oct. 5	4.50
Lyric. White. Sgl. Short.....	Oct. 5	4.50
C Youdath's White. Double white. L. Dec. Med.	Oct. 5	3.00
Monogram. White, single. Short.....	Oct. 5	4.00
Classic. White Button. Tall.....	Oct. 10	4.00
Maestro. White Pom. Short.....	Oct. 10	4.00
Renown. White daisy. Med.....	Oct. 10	4.00
PC White Spoon. Pure white. Med.....	Oct. 10	3.00
Silverplate. Dec. Med.....	Oct. 12	4.00
Silver Ball. White. Pom. Tall.....	Oct. 15	2.75
Irene. White, yellow center. Button. Med.....	Oct. 15	3.00
Norona. White. S. Pom. Med.....	Oct. 15	4.50

YELLOW

Name and Description	Flowering Date	Price 50 Only
Butterball. Butter yellow. Button. Short.....	Sept. 1	\$3.00
P Early Gold. Golden yellow. Pom. Short.....	Sept. 5	3.50
C Golden Hours. Chrome. Pom. Med.....	Sept. 8	3.25
Genista (New). Canary pom. Med.....	Sept. 12	7.50
P Pomponette. Early yellow. Pom. Short.....	Sept. 15	3.00
Sunapee. Deep lemon. Pom. Tall.....	Sept. 15	3.25
P Yellow Supreme (H). Bright lemon. Cushion. Short	Sept. 15	3.00

Name and Description	Flowering Date	Price 50 Only
P Yellow Chris Columbus. Bright lemon. L. Dec. Med.	Sept. 15	\$3.50
Yellow Avalanche. Light lemon. L. Dec. Tall	Sept. 15	3.25
Yellow Cushion. Light yellow. Cushion. Short	Sept. 15	3.00
P Early Yellow. Deep lemon. Button. Short.....	Sept. 15	3.00
Defiance (H). Golden yellow, Quilled petals. Dec. Tall	Sept. 15	3.50
Golden Carpet. Golden yellow. Pom. Short.....	Sept. 15	4.50

For more than 50 of a variety, see price schedule on page 15.

GARDEN (HARDY) MUMS

YELLOW, Continued

Name and Description	Flowering Date	Price 50 Only
Ming. Orange yellow pom. Med.....	Sept. 18	\$5.00
P September Sunshine. Semi-double, bright yellow. Med.	Sept. 20	3.25
Wychwood. Canary yellow. L. Pom. Med.....	Sept. 20	3.25
Canary Wonder. Canary yellow. Pom. Med.....	Sept. 25	5.00
C Charles Nye. Deep lemon. L. Pom. Tall.....	Sept. 25	3.25
P Honeycomb. Golden yellow. Pom. Med.....	Sept. 25	3.00
Lee Powell. Chinese yellow. L. Dec. Tall.....	Sept. 25	5.00
P Moonlight. Disbud. Bright yellow. Med.....	Sept. 25	5.00
Tangerine. Deep orange. L. Dec. Med.....	Sept. 25	3.25
Flaxen Beauty. Golden yellow. L. Dec. Med...	Oct. 1	5.00
King Midas. Light lemon yellow. L. Dec. Med.	Oct. 1	3.00
Chiquita. Deep lemon. Pom. Med.....	Oct. 1	3.25
Dwight Douglas (New). Golden yellow. L. Dec. Med.	Oct. 5	7.50
Garland. Lemon. Sgl. Short.....	Oct. 5	4.50

Name and Description	Flowering Date	Price 50 Only
C James Eadie. Deep chrome. L. Pom. Tall.....	Oct. 5	\$3.25
C Polaris. Golden buff. Sgl. Med.....	Oct. 5	4.00
P Mrs. Rotan. Deep chrome. L. Dec. Med.....	Oct. 5	3.25
Vanguard. Golden. L. Pom. Med.....	Oct. 5	5.00
P Yellow Spoon. Light yellow. Med.....	Oct. 10	3.50
Golden Spoon. Golden yellow. Med.....	Oct. 10	3.00
Yellow Blanket. Bright lemon. Button. Med...	Oct. 10	3.25
Bright Forecast. Lemon Pom. Med.....	Oct. 10	4.00
P Goldrush. Lemon yellow Sgl. Med.....	Oct. 10	4.00
Treasure. Golden. Pom. Tall.....	Oct. 10	4.50
P Lemonade. Ivory yellow. Pom. Med.....	Oct. 12	4.00
Sweepstake. Lemon. Pom. Med.....	Oct. 12	4.00
Judith Anderson. Golden yellow. Button. Med.	Oct. 15	3.00
Rodell Imp. Light lemon. Button. Med.....	Oct. 15	2.75
Yellow Irene. Light lemon. Button. Med.....	Oct. 15	3.00
Old Gold. Golden Pom. Med.....	Oct. 15	3.25

BRONZE AND RED

Name and Description	Flowering Date	Price 50 Only
Early Harvest. Mahogany-orange. Cushion. Short	Sept. 8	\$3.25
Harbinger. Golden bronze. Dec. Short.....	Sept. 8	3.25
P Early Bronze. Orange bronze. Button. Short. Sept. 8	Sept. 8	3.00
C W. P. Snyder. Apricot-orange. L. Pom. Med.	Sept. 10	3.50
Autumn Song. Wine-rose. Dec. Med.....	Sept. 10	3.25
C Red Gold. Red and gold. Button. Med.....	Sept. 15	3.25
Orloma (New). Apricot bronze. Dec. Med.....	Sept. 15	7.50
Sept. Bronze. Golden bronze. Button. Med.....	Sept. 20	3.00
Goblin. Golden bronze. Pom. Tall.....	Sept. 20	3.00
Red Glow. Dark red. Pom. Med.....	Sept. 20	3.50
Orsona (New). Red and bronze. Dec. Med.....	Sept. 20	7.50
Scarlet Crimson. Bright red. Dec. Med.....	Sept. 20	3.25
Mme. Cadillac (New). Raspberry wine. Short	Sept. 20	7.50
Rouge Cushion. Bright red. Cushion. Short.....	Sept. 25	5.00
Champion Cushion. Deep bronze. Cushion. Short	Sept. 25	3.00
Commander Cushion. Red. Short.....	Sept. 25	3.00
Mahogany Cushion. Jasper red. Short.....	Sept. 25	3.50
Marionette. Rust red. Pom. Med.....	Sept. 25	4.00
Holiday (H). Golden bronze Pom. Med.....	Sept. 25	5.00
Remembrance. Deep carmine. L. Dec. Med.....	Sept. 28	3.50
C Kathleen Lehman. Orange bronze. L. Dec. Med.	Sept. 28	4.50
Fiesta. Orange rust Pom. Med.....	Oct. 1	3.50
Jubilee (H). Crimson. Pom. Med.....	Oct. 1	6.25
C Magnificent. Plum red. L. Dec. Tall.....	Oct. 1	3.50
Red Riding Hood. Bright red. Dec. Med.....	Oct. 1	3.25
Sam Williston. Deep red. Cushion. Short.....	Oct. 1	3.00
CP Bonfire. Bright red. Dec. Med.....	Oct. 1	3.50
Mogul. Orange rust. Pom. Med.....	Oct. 1	5.00
Brigadier. Plum red. L. Pom. Med.....	Oct. 1	5.00
Cardinal Spoon. Cardinal red, yellow tube. Spoon. Med.	Oct. 1	3.50
Firecracker. Mahogany. Dec. Tall.....	Oct. 5	4.50
Avalon. Orange bronze. Pom. Tall.....	Oct. 5	5.00
C Cydonia. Mahogany red. L. Dec. Tall.....	Oct. 5	3.00

Name and Description	Flowering Date	Price 50 Only
P September Cheer. Cherry red. Sgl. Med.....	Oct. 5	\$3.00
C Meditation. Jasper red. L. Pom. Tall.....	Oct. 5	3.25
C Burgundy. Wine red. L. Dec. Tall.....	Oct. 5	3.00
Ruby Pompon. Ruby crimson. Pom. Med.....	Oct. 5	3.00
P Red Velvet. Dark crimson. L. Dec. Med.....	Oct. 5	3.25
P Mona. Rust bronze. Pom. Med.....	Oct. 5	4.00
Courageous. Dark ruby. L. Dec. Med.....	Oct. 5	3.25
P Mrs. DuPont. Coral buff. L. Dec. Tall.....	Oct. 5	3.50
Beacon. Coral apricot. L. Dec. Tall.....	Oct. 8	4.00
Panorama. Orange rust. Dec. Tall.....	Oct. 8	5.00
Aviator. Copper. Pom. Med.....	Oct. 8	3.25
CP Amber Glow. Rosy bronze. L. Dec. Tall.....	Oct. 8	3.25
Miguel (New). Raspberry red. Dec. Tall.....	Oct. 8	7.50
Mayford's Triumph. Scarlet bronze. L. Inc. Tall	Oct. 8	3.50
The Chief. Scarlet and gold. Dec. Med.....	Oct. 10	3.00
P James Stewart. Apricot-gold. Pom. Tall.....	Oct. 10	4.00
Huntsman. Scarlet orange. L. Dec. Tall.....	Oct. 10	3.50
Caravan. Salmon bronze. L. Dec. Med.....	Oct. 10	4.50
Bokhara. Crimson. Dec. Med.....	Oct. 10	3.50
Blueblood. Amaranth red. Dec. Tall.....	Oct. 10	4.50
PC Carnival. Burnt orange. L. Pom. Med.....	Oct. 10	3.50
C Carmine Queen. Carmine. L. Pom. Tall.....	Oct. 10	4.00
Orpheus (New). Roman red. L. Pom. Tall....	Oct. 10	7.50
P Bamboo. Buff orange. Sgl. Tall.....	Oct. 10	4.00
P Calico. Coral bronze. Sgl. Tall.....	Oct. 10	4.00
Fireside. Burnt orange. Dec. Tall.....	Oct. 10	4.00
Nytoda. Golden apricot. Sgl. Med.....	Oct. 12	5.00
Admiral. Dark red. Dec. Med.....	Oct. 12	4.50
Fashion. Salmon and rosewood. Dec. Med.....	Oct. 12	4.00
P Witchery. Golden bronze. Dec. Med.....	Oct. 12	4.00
Nokomis. Reddish bronze. L. Dec. Med.....	Oct. 12	4.00
Nocturne. Crimson. Pom. Med.....	Oct. 12	4.00
Robinhue. Dark red. L. Dec. Tall.....	Oct. 15	4.00
C Bronze Pyramid. Orange bronze. L. Dec. Tall	Oct. 15	3.25
Detroiter. Red-bronze. Pom. Tall.....	Oct. 15	3.50
P Carmelita. Apricot bronze. L. Dec. Tall.....	Oct. 15	4.00
Cocktail. Salmon bronze. Pom. Med.....	Oct. 15	4.50
Rajah. Scarlet. Sgl. Med.....	Oct. 15	4.50

PINK

Name and Description	Flowering Date	Price 50 Only
Gladness. China rose. Dec. Short.....	Aug. 28	\$3.50
Cecil Beed. Deep lavender. Dec. Med.....	Sept. 1	5.00
C Dr. Longley. Rose pink. Dec. Med.....	Sept. 1	4.00
Salmon Precose. Salmon pink. L. Dec. Short..	Sept. 1	3.50
Welcome. Mallow-purple. Sgl. Med.....	Sept. 1	3.00

Name and Description	Flowering Date	Price 50 Only
Purple Star. Dahlia purple. Pom. Med.....	Sept. 5	\$3.00
C Barbara Small. Pinkish lavender. Pom. Tall..	Sept. 10	3.25
C Nye's Favorite. Lavender. Dec. Med.....	Sept. 10	3.50
Orchid Helen. Orchid lavender. Dec. Med.....	Sept. 10	4.50
Chippewa. Bright purple. L. Dec. Med.....	Sept. 15	3.25

GARDEN (HARDY) MUMS

PINK, Continued

Name and Description	Flowering Date	Price 50 Only	Name and Description	Flowering Date	Price 50 Only
C Violet. Amaranth pink. Pom. Med.....	Sept. 15	\$3.25	P Tiffany Rose. Deep rose. Sgl. Med.....	Oct. 1	\$3.00
Royal Robe. Purple. Dec. Med.....	Sept. 15	6.25	Alex. Cummings. Deep rose. L. Dec. Tall.....	Oct. 3	6.25
Fairbow. Lavender pink. Pom. Med.....	Sept. 20	3.50	Enterprise. Amaranth. Pom. Tall.....	Oct. 5	5.00
Tapestry. Bright pink. L. Dec. Med.....	Sept. 20	4.50	Pink Surprise. Lavender. Dec. Tall.....	Oct. 5	3.50
Heather Bloom. Heather pink. Dec. Med.....	Sept. 20	3.00	P Lavender Lady. Lavender pink. Dec. Tall.....	Oct. 5	3.50
Alert. Dark purple. L. Dec. Med.....	Sept. 20	3.50	Dream Girl. Light lavender. Pom. Med.....	Oct. 10	3.50
Major Cushion. Lavender. Cushion. Short.....	Sept. 25	3.00	Argonne. Dark lavender. Pom. Med.....	Oct. 10	3.50
Olive Longland. Apricot-salmon. L. Dec. Med.	Sept. 25	2.75	Courtier. Lavender Pink. Dec. Med.....	Oct. 10	4.50
C Spellbound. Lavender-pink. Dec. Med.....	Sept. 25	3.25	Lassie. Dark pink. L. Dec. Med.....	Oct. 10	4.50
Capt. J. Smith. Lavender-pink Cushion. Short	Sept. 25	3.00	Orchid Spoon. Orchid lavender. Spoon. Med.....	Oct. 10	3.50
C Pink Beauty. Salmon pink. Dec. Med.....	Sept. 25	3.00	Rose Spoon. Lavender rose. Spoon. Med.....	Oct. 10	3.00
September Dawn. Rose pink. Dec. Med.....	Sept. 25	3.00	Masquerade. Lavender rose. Pom. Med.....	Oct. 10	3.50
Imp. Early Wonder. Deep lavender. Pom. Med.	Sept. 25	3.00	Joybringer. Salmon rose. Dec. Short.....	Oct. 10	4.00
Rosita. Lavender rose. Button. Med.....	Sept. 28	3.25	Winsome. Lavender purple. L. Ref. Tall.....	Oct. 10	3.50
Pink Opal. Persian rose. Pom. Med.....	Sept. 28	5.00	Sweetheart. Light lavender. Sgl. Tall.....	Oct. 10	4.00
C Betty. Pink, rose center. L. Dec. Tall.....	Sept. 28	3.25	Serenade. Magenta Sgl. Tall.....	Oct. 10	4.00
Misty Maid. Light pink. Dec. Med.....	Sept. 28	3.50	Elizabeth Hood. Lavender pink. L. Dec. Med.....	Oct. 12	5.00
Malinda Brown. Lavender rose Pom. Med.....	Sept. 28	6.25	Salute. Deep orchid. Sgl. Tall.....	Oct. 12	4.00
C Pat. Lehmann. Peach pink. Dec. Tall.....	Sept. 28	4.50	C Allegro. Shrimp pink. Pom. Tall.....	Oct. 12	3.25
Fascination. Lavender pink. L. Dec. Med.....	Oct. 1	6.25	Adagio. Raspberry rose. Pom. Tall.....	Oct. 12	4.00
Myrtle Walgreen. Amaranth purple. L. Pom. Med.	Oct. 1	3.50	Dawn Rose. Grenadine pink. L. Dec. Med....	Oct. 15	3.50
			Symphony. Mauve and lavender. Dec. Tall....	Oct. 15	3.00
			P Jewell. Lavender pink. Pom. Med.....	Oct. 15	3.00
			P Dark Jewell. Lavender pink. Pom. Med.....	Oct. 15	3.00

THIS TABLE INDICATES PRICES FOR MORE THAN 50 OF A VARIETY ON ONE SHIPMENT

50 Only	100-250 Per 100	300-450 Per 100	500-950 Per 100	1000-2450 Per 100	2500-up Per 100
\$2.75	\$5.20	\$4.95	\$4.65	\$4.40	\$4.10
3.00	5.70	5.40	5.10	4.80	4.50
3.25	6.15	5.85	5.50	5.20	4.85
3.50	6.65	6.30	5.95	5.60	5.25
4.00	7.60	7.20	6.80	6.40	6.00
4.50	8.55	8.10	7.65	7.20	6.75
5.00	9.50	9.00	8.50	8.00	7.50
6.25	12.00	11.50	11.00	10.50	10.00
7.50	14.50	14.00	13.50	13.00	12.50

SPECIAL COLLECTIONS of GARDEN VARIETIES

SPECIAL OFFER No. 1

500 rooted cuttings, our selection; 50 each of 10 taller varieties for cutting. **\$25.50.**

SPECIAL OFFER No. 2

500 rooted cuttings, our selection; 50 each of 10 medium to short varieties for pots or bedding. **\$25.50.**

SPECIAL OFFER No. 3

500 rooted cuttings, our selection; 50 each of 5 varieties for cutting, 50 each of 5 varieties for bedding. **\$25.50.**

INSTRUCTIONS FOR ORDERING

The minimum total order that can be accepted is 500.

Fifty of each variety is the minimum that can be supplied. More than 50 of a variety must be in multiples of 50.

Orders must be marked with a definite delivery date, such as May 10th, June 1st, etc. Orders marked "Early Delivery," "Deliver when ready," "Spring Delivery," are too indefinite.

SUBSTITUTIONS—We will substitute varieties as good or better for any items not listed unless order is marked **No Substitutions.**

SHIPPING INFORMATION—Special shipping instructions and address if different from your regular mail address should be shown on your order.

All cuttings are shipped Railway Express, Air Freight or Air Express, collect. If you have any preference, designate on your order; otherwise our shippers will use their best judgment. Cuttings are in perfect condition when they are accepted by the transportation company. Therefore, if there is any damage enroute from being broken, heated or frozen, **CALL YOUR EXPRESS or AIR FREIGHT AGENT** to inspect the shipment upon arrival, marking on express receipt or bill of lading the condition of the package and amount of damage, etc. **YOU MUST FILE CLAIMS,** as our responsibility ceases when the carrier accepts shipment. We cannot be responsible for the safe arrival of your cuttings.

IMPORTANT: ABSOLUTELY NO CHANGES ON YOUR ORDER CAN BE ACCEPTED WITHIN 30 DAYS OF DELIVERY DATE.



For your Easter pot plant sales, use Ball Crofts.

Croft Lilies

FOR EASTER POT PLANTS

For your Easter sales, use Ball Crofts, the most popular Lily for Easter pot plants. Be sure your bulbs are clean and disease-free.

To assure your getting the kind of bulbs you need, our bulbs are inspected by us thruout the growing season, and are also state inspected. Harvesting, grading, packing, and shipping are supervised by specialists according to our instructions. All our bulbs are pre-cooled and shipped at the proper time for planting in a 60° house. See cultural notes on page 30.

BALL CROFTS

Available in the following sizes:	Per Case	5 Cases	10 Cases
Size 7-8 in., 250 bulbs per case....	}		
Size 8-9 in., 200 bulbs per case....			
Size 9-10 in., 150 bulbs per case..			
Size 10 in. up., 100 bulbs per case			
		Prices	Later

F.O.B. Cold Storage plant nearest you.

FOR CUT FLOWERS

Ball Crofts make a large, more perfectly formed flower than other cut flower lilies. Close planting, adequate water, feeding, and slight shading will produce Croft Lilies plenty tall for cut flowers. Several cut flower checks we have had in past years averaged 30 inches.

The dates for flowering on the following planting schedule for Crofts for cutting are approximate. In warm weather they may vary 10 to 20 days, depending on temperature, sunlight, and the season of the year. Plant in 6 inch flats or bench direct—minimum night temperature 60°.

Plant	First Bloom	Cut Finished	Size	Size	Space	No. of bulbs per sq. ft.
Nov. 15	March 15	Apr. 15	7/8	7/8	4"x 6"	6
Dec. 15	Apr. 15	May 15	7/8	7/8	6"x 6"	4
Jan. 15	May 15	June 5	7/8	8/9	6"x 8"	3
Feb. 15	June 1	June 20	7/8-8/9	9/10		
March 15	June 15	July 5	8/9-9/10			
April 1	July 1	July 20	8/9-9/10			
April 15	July 15	Aug. 5	8/9-9/10			
May 1	Aug. 1	Aug. 20	8/9-9/10			
May 15	Aug. 15	Sept. 10	8/9-9/10			

After Feb. 1 spacing can be some closer than above.

To insure delivery
from our
Cold Storage Plant
nearest you
Orders must be
placed
E A R L Y



Ball Crofts are inspected regularly thruout the growing season to assure you the best quality bulbs.

Lilies for Cut Flowers

AMERICAN GROWN

ACE

Prefer for Easter Pots

November to May Delivery

Per Case

7-8 in., 250 bulbs per case.....	\$60.00
8-9 in., 200 bulbs per case.....	75.00

ESTATE

December to May Delivery

Per Case

7-8 in., 250 bulbs per case.....	\$50.00
8-9 in., 200 bulbs per case.....	73.00
9-10 in., 150 bulbs per case.....	68.00

Ace and Estate Lilies shipped F.O.B. cold storage plant nearest you.

FLORIDI

Delivery mid-September

Per Case

6 1/2-7 in., 300 bulbs per case.....	\$55.00
7-8 in., 250 bulbs per case.....	75.00
8-9 in., 200 bulbs per case.....	75.00

F.O.B. Atlanta and Chicago

Offered Subject to Crop

JAPANESE GROWN

F.O.B. Shipping Point

ALBUM (Speciosum)

(White Rubrum)

December to June Delivery

Per Case

7-9 in., 250 bulbs per case.....	\$80.00
8-9 in., 200 bulbs per case.....	75.00
9-10 in., 140 bulbs per case.....	75.00

RUBRUM (Speciosum)

Carmine Pink

December to June Delivery

Per Case

7-9 in., 250 bulbs per case.....	\$40.00
8-9 in., 200 bulbs per case.....	38.00
9-10 in., 140 bulbs per case.....	36.00
9-11 in., 125 bulbs per case.....	36.00
10-11 in., 100 bulbs per case.....	35.00

AURATUM (Gold Band)

White, spotted crimson, gold stripes

December to March Delivery

Per Case

7-9 in., 250 bulbs per case.....	\$40.00
8-9 in., 200 bulbs per case.....	37.50
9-10 in., 140 bulbs per case.....	35.00
10-11 in., 100 bulbs per case.....	35.00

ERABU

September to February Delivery

Per Case

7-9 in., 300 bulbs per case.....	\$45.00
8-10 in., 225 bulbs per case.....	42.50
9-10 in., 200 bulbs per case.....	42.50
10-11 in., 150 bulbs per case.....	40.00

GIGANTEUM

November to June Delivery

Per Case

7-9 in., 300 bulbs per case.....	\$48.00
8-10 in., 225 bulbs per case.....	48.00

All prices in this catalog were in effect when we went to press.

Decreases or increases will be adjusted at time of delivery.

BALL HARDY LILY COLLECTION

F.O.B. West Chicago

An ideal unit for growers who want only a small number of Lilies in several varieties.

Every unit contains cultural information for both greenhouse and outdoor growing of each variety. Pictures of each variety are also included to help you sell bulbs.

Each unit contains the following:

- 35 bulbs **Croft**. Trumpet. Pure white.
- 35 bulbs **Regale**. Trumpet. White with pale pink.
- 35 bulbs **Rubrum**. Reflex. Carmine-pink.
- 35 bulbs **Auratium**. Bowl. White, spotted crimson; yellow stripes.
- 35 bulbs **Album**. Reflex. White Rubrum.

1 Case 175 Bulbs (Collection)\$50.00

West Coast-Grown Bulbs

Case lots F.O.B. shipping point nearest you.

IRIS

WEDGEWOOD. Blue. Available in following sizes. Prices later.

8½-9 in. 9-10 in. 10-11 in. 11 in.-up

Other Varieties	Per 1000	
	7/8	8/9
D. Haering. Fine white, lavender blue shading..	\$37.50	\$57.50
Golden Harvest. Golden yellow.....	46.00	60.00
Imperator. Late, dark blue.....	25.00	32.50
Pacific Gold. Creamy yellow.....	46.00	60.00
Van Vliet. Early dark blue.....	37.50	57.50
White Excelsior. Pure white.....	46.00	60.00
White Superior. Large white.....	46.00	60.00
Yellow Queen. Golden yellow.....	46.00	60.00



IRIS WEDGEWOOD

A bench of Wedgewood for cut flowers in our West Chicago greenhouse. That's Clarence Bahnfleth, head of our Bulb Department, looking them over.

DAFFODILS

TRUMPET VARIETIES

King Alfred. Jumbo size.....	\$110.00	per 1000
	Per 1000	
	DN No. 1	DN No. 2
King Alfred. Golden yellow.....	\$95.00	\$70.00
Golden Harvest. Golden yellow.....	115.00	95.00
Rembrandt. Dark golden yellow.....	105.00	80.00
Aerolite. Yellow	95.00	70.00
Flower Carpet. Deep yellow. Improved King Alfred	115.00	95.00
Mrs. E. H. Krelage. Creamy white.....	155.00	130.00
Spring Glory. White, yellow trumpet.....	105.00	80.00
Queen of the Bicolors. White, yellow trumpet..	105.00	80.00

Other Classes

Actaea (Poeticus). White, yellow cup, edged red	85.00	60.00
Cheerfulness (Double Poetaz). Creamy white..	65.00	45.00
Geranium (Poetaz). Pure white, orange red cup	80.00	60.00
Laurens Koster (Poetaz). White, orange-yel- low cup	65.00	45.00
Scarlet Elegance (Incomparabilis). Yellow, orange red cup	80.00	60.00
Texas (Double). Yellow and fiery orange.....	120.00	100.00
Twink (Double). White and orange.....	105.00	80.00
Von Sion (Double). Yellow.....	90.00	65.00

TULIPS

	Per 1000	
	12/up	11/12
Albino (Cottage). Pure white.....	\$60.00	\$48.00
Bartigon (Darwin). Bright red.....	45.00	37.50
Clara Butt (Darwin). Salmon pink.....	45.00	37.50
Cordell Hull (Rembrandt). Blood red on white	60.00	50.00
Dido (Cottage). Orange red.....	45.00	37.50
Dillenberg (Breeder). Orange, edged apricot....	45.00	37.50
Elmus (Triumph). Carmine red, edged white....	60.00	50.00
Farncombe Sanders (Darwin). Cochineal red....	45.00	37.50
Golden Harvest (Cottage). Golden yellow.....	45.00	37.50
Her Grace (Mendel). White, edged lilac rose..	60.00	48.00
Inglescombe Yellow (Cottage).....	45.00	37.50
Insurpassable (Darwin). Lilac.....	60.00	48.00
Korneforos (Triumph). Light red.....	55.00	42.50
Krelage's Triumph (Mendel). Crimson red.....	45.00	37.50
Mrs. J. T. Scheepers (Cottage). Light canary yellow	60.00	48.00
Philip Snowden (Darwin). Carmine rose.....	45.00	37.50
Princess Elizabeth (Darwin). Rose.....	45.00	37.50
Prunus (Darwin). Salmon pink.....	45.00	37.50
Red Pitt (Darwin). Bright red.....	47.00	37.50
Rose Copeland (Darwin). Lilac rose.....	45.00	37.50
Shackleton (Mendel). Pure white.....	60.00	48.00
Utopia (Darwin). Cardinal red.....	45.00	37.50
White Sail (Mendel). Creamy white.....	45.00	37.50
Wm. Pitt (Darwin). Cochineal red.....	45.00	37.50

See Page 31 for Notes on Forcing Iris, Daffodils, and Tulips.



Holland Tulips

Easter, 1954, will be on April 18.

Order Early!

The earlier you place your order, the better chance you have of getting the quantities and varieties you want when you want them. Varieties not listed below but which are available in Holland can be supplied if you order early. And you may save on express charges on case lots if you order 3 to 6 months before shipping time, as we can arrange for shipment from a location near you in most cases.

Unpack Bulbs as Received

When your bulbs are delivered, unpack and open all bags at once to allow fresh air to circulate around the bulbs. Plant as soon as possible.

All Tulips, 11/12 and 12/up, packed 250 per unit (bag). F.O.B. Shipping point.

DARWIN

	Per 1000			Per 1000	
	12/up	11/12		12/up	11/12
*Afterglow. 28". Orange rose.....	\$55.00	\$47.00	*Princess Elizabeth. 26". Rose.....	\$42.00	\$37.00
*Allard Pierson. 28". Crimson maroon.....	42.00	37.00	*Prunus. 24". Salmon pink.....	42.00	37.00
*All Bright. 24". Bright red.....	42.00	37.00	Queen of Night. 28". Deep velvet maroon....	42.00	37.00
*Aristocrat. 28". Soft violet rose.....	75.00	67.00	*Red Pitt. 24". Bright red.....	44.00	38.00
*Bartigon. 24". Clear crimson red.....	42.00	37.00	*Rose Copeland. 24". Lilac rose.....	42.00	37.00
*Bartigon Max. Larger form of Bartigon.....	42.00	37.00	Sunkist. 26". Deep golden yellow.....	50.00	45.00
*Campfire. 24". Blood red.....	42.00	37.00	*The Bishop. 28". Violet purple.....	66.00	56.00
Charles Needham. 24". Brilliant red.....	55.00	47.00	*Utopia. 22". Cardinal Red.....	42.00	37.00
*City of Haarlem. 28". Scarlet.....	60.00	55.00	*Victoire de Oliveira. 26". Deep crimson.....	42.00	37.00
Clara Butt. 24". Salmon, rosy pink.....	42.00	37.00	*Wm. Copeland. 24". Lavender.....	42.00	37.00
*Cordell Hull (Rembrandt). 24". Red on white.....	52.00	47.00	*Wm. Pitt. 24". Brilliant carmine.....	42.00	37.00
*Demeter. 28". Reddish purple, early.....	72.00	62.00	Yellow Giant. 30". Golden yellow.....	42.00	37.00
Eclipse. 26". Crimson maroon.....	55.00	47.00	Zwanenburg. 26". Ivory white.....	55.00	47.00
Farncombe Sanders. 28". Scarlet.....	42.00	37.00	Choice Mixture of Darwin Tulips.....	42.00	37.00
Glacier (Wildlust). 26". Ivory white.....	57.00	48.00			
*Golden Age. 24". Yellow, flushed salmon orange.....	55.00	47.00			
Insurpassable. 26". Lilac.....	55.00	47.00			
La Tulipe Noire. 26". Purple black.....	42.00	37.00			
Niphetos. 26". Soft sulphur yellow.....	55.00	50.00			
*Philip Snowden. 24". Light carmine rose....	42.00	37.00			
Pride of Haarlem. 28". Large cerise.....	42.00	37.00			
*Pride of Zwanenburg. 28". Bright rose, lighter edge.....	57.00	54.00			

LATE DOUBLE TULIPS

*Coxa. 18". Carmen red, lighter edge.....	80.00	67.00
Eros. 20". Clear old rose.....	88.00	83.00
*Livingstone. 18". Cardinal red.....	72.00	62.00
*Mount Tacoma. 18". Pure white.....	55.00	47.00
*Uncle Tom. 22". Dark glossy red.....	110.00	100.00
*Best varieties for forcing.		

Holland Tulips

(Continued)

COTTAGE TULIPS

	Per 1000	
	12/up	11/12
Advance. 30". Scarlet.....	\$75.00	\$67.00
* Albino. 20". Pure white.....	55.00	47.00
Belle Jaune (Imp. Inglescombe). 24". Yellow.....	42.00	37.00
* Carrara. 20". White.....	42.00	37.00
Dido. 28". Orange rose.....	42.00	37.00
* Golden Harvest. 26". Lemon yellow.....	42.00	37.00
G. W. Leak. 26". Scarlet, yellow base.....	55.00	47.00
Henry Correvon. 26". Geranium red, white base.....	55.00	47.00
Inglescombe Yellow. 22". Medium yellow.....	42.00	37.00
Marjorie Bowen. 28". Soft rose, apricot edge.....	42.00	37.00
Marshall Haig. 28". Bright scarlet.....	57.00	50.00
* Mother's Day. 24". Lemon yellow.....	42.00	37.00
Mount Erebus. 28". White.....	55.00	47.00
Mrs. John T. Scheepers. 26". Light yellow..	55.00	47.00
Ossi Oswald. 24". Cream, flushed rose....	42.00	37.00
* Princess Margaret Rose. 22". Yellow, flushed orange red.....	42.00	37.00
Rosabella. 24". Pale rose with lighter edge.....	55.00	47.00
Yellow Emperor. 24". Golden yellow.....	42.00	37.00

TRIUMPH TULIPS

* Alberio. 16". Cherry red; edged yellow.....	47.00	42.00
* Aviator. 16". Carmine red; edged white....	52.00	47.00
* Bandoeng. 16". Mahogany red; edged yellow.....	42.00	37.00
* Crater. 16". Deep carmine red.....	50.00	43.00
* Denbola. 16". Cerise red with cream.....	65.00	55.00
* Edith Eddy. 18". Carmine red; edged white.....	42.00	37.00
* Elizabeth Evers. 15". Beautiful pink.....	52.00	47.00
* Elmus. 18". Cherry red, white border.....	55.00	47.00
* Hindenburg. 20". Garnet red, edged yellow.....	52.00	47.00
* Kansas. 16". Snow white.....	42.00	37.00
* Korneforos. 20". Light red.....	52.00	47.00
* Red Giant. 16". Soft red.....	65.00	55.00
* Telescopium. 20". Violet rose.....	42.00	37.00
* Ursa Minor. 13". Golden yellow.....	47.00	42.00

MENDEL TULIPS

* Fridjof Nansen. 16". Carmen red; medium forcing.....	55.00	47.00
* Fuga. 10". Blood red; early forcing.....	57.00	47.00
* Her Grace. 18". Pink and white.....	55.00	50.00
* Krelage's Triumph. 14". Deep red; early forcing.....	42.00	37.00
* Olaf. 14". Scarlet; early forcing.....	67.00	62.00
* Scarlet Admiral. 16". Crimson; medium early.....	42.00	37.00
* Schackleton. 16". Pure white.....	55.00	47.00
* Van der Erden. 16". Glowing red; early.....	42.00	37.00
* Weber. 18". White and pink; medium early.....	42.00	37.00
* White Sail. 14". White; early.....	42.00	37.00

BOTANICAL TULIPS

(Fosteriana)

* Red Emperor. 20". Early flowering, fiery scarlet.....	67.00	60.00
--	-------	-------

EARLY SINGLE TULIPS

	Per 1000	
	12/up	11/12
* Brilliant Star. 10". Scarlet.....	\$60.00	\$52.00
* Couleur de Cardinal. 13". Deep scarlet.....	60.00	52.00
Crown Imperial. Mahogany edged, yellow....	47.00	37.00
* Fred Moore. 11". Apricot orange.....	47.00	37.00
* General de Wet. 13". Yellow; flushed orange.....	47.00	37.00
* Ibis. 12". Deep rose.....	47.00	37.00
* Keizerskroon. 14". Yellow flower, edged red.....	60.00	57.00
Pink Beauty. 12". Deep rose and white.....	100.00	93.00
* Prince of Austria. 13". Orange scarlet.....	47.00	37.00
* Rising Sun. 13". Golden yellow.....	47.00	37.00
* Sunburst. 12". Orange yellow, flushed red.....	55.00	45.00
* Van der Neer. 10". Violet.....	60.00	57.00
* Vermilion Brilliant. 10". Vermilion red.....	60.00	57.00
* White Hawk. 12". Pure white.....	47.00	37.00
* Yellow Prince. 10". Yellow, sweet scented..	47.00	37.00
Choice Mixture of Early Singles.....	47.00	37.00

EARLY DOUBLE TULIPS

* Dante. 12". Blood red.....	83.00	75.00
* Electra. 10". Deep cherry red.....	55.00	45.00
* Marechal Niel. 10". Yellow, flushed orange.....	55.00	45.00
* Mr. Van der Hoef. 10". Pure yellow.....	55.00	45.00
Murillo. 10". White, flushed pink.....	55.00	45.00
* Orange Nassau. 10". Orange red.....	55.00	45.00
* Peach Blossom. 10". Deep pink.....	55.00	45.00
* Schoonoord. 10". Pure white.....	55.00	45.00
* Triumphator. 10". Deep pink.....	55.00	45.00
* Vuurbaak. 10". Scarlet.....	75.00	68.00
Choice Mixture of Early Doubles.....	55.00	45.00

PARROT TULIPS

Blue Parrot. 24". Dark lavender.....	42.00	37.00
Discovery. 26". Violet pink, edged white....	100.00	90.00
Fantasy. 22". Deep salmon, blotched green.....	42.00	37.00
Orange Favorite. 22". Orange, green, yellow.....	55.00	47.00
Red Champion. 24". Flushed scarlet.....	75.00	65.00
Sunshine. 18". Golden yellow.....	55.00	47.00
Therese. 24". Cochineal red.....	55.00	47.00
Violet Queen. 24". Pearl blue.....	72.00	62.00

BREEDER TULIPS

Bacchus. 26". Dark violet blue.....	55.00	47.00
Cherbourg. 30". Yellow, tinted bronze....	75.00	65.00
Dillenburg. 26". Orange edged apricot.....	42.00	37.00
Dom Pedro. 24". Coffee brown.....	55.00	47.00
Indian Chief. 32". Mahogany red.....	55.00	50.00
Louis XIV. 30". Bluish violet, flushed bronze.....	55.00	47.00
Orange Delight. 26". Bronze, flushed orange.....	55.00	47.00
Panorama. 20". Rich chestnut brown.....	42.00	37.00
Tantalus. 30". Pale purple and lilac; flushed yellow.....	55.00	50.00

*Best varieties for forcing.

Holland Grown Daffodils



KING ALFRED DAFFODIL

The large, golden yellow flowers of King Alfred make it the most popular Daffodil on the market today.

DOUBLE DAFFODILS

	Per 1000	
	DN No. 1	DN No. 2
Texas. Yellow and fiery orange.....	\$90.00	\$75.00
Twink. Creamy white, orange center.....	90.00	72.00
Van Sion. Yellow.....	90.00	72.00

TRUMPET DAFFODILS

Aerolite. Yellow	90.00	75.00
Beersheba. Pure white	170.00	155.00
Flower Carpet. Deep golden yellow.....	105.00	95.00
Golden Harvest. Golden yellow.....	110.00	100.00
King Alfred. Golden yellow.....	85.00	70.00
Mrs. E. H. Krelage. Creamy white.....	105.00	95.00
President Lebrun. White, yellow trumpet.....	115.00	105.00
Queen of Bicolors. White, yellow trumpet.....	115.00	105.00
Rembrandt. Dark golden yellow.....	100.00	90.00
Romaine. Pure white.....	140.00	125.00

LEEDSI DAFFODILS

Daisy Schaeffer. White, yellow cup.....	115.00	105.00
Fortune. Deep yellow, orange cup.....	115.00	105.00
Mrs. R. O. Backhouse. Creamy white, shell pink cup	110.00	100.00
Orange Glow. Pale yellow, orange cup.....	75.00	65.00
Scarlet Elegance. Yellow, cup deep orange red.	75.00	65.00

POETAZ DAFFODILS

Cheerfulness. White, white & yellow center....	72.00	60.00
Geranium. White, deep orange-red cup.....	80.00	70.00
La Fiancee. White, light orange cup.....	75.00	65.00
Laurens Koster. White, yellow cup.....	75.00	65.00
Scarlet Gem. Yellow, red cup.....	75.00	65.00

All Narcissi packed as follows:

Daffodils, DN No. 1.....	500 per unit (case)
Daffodils, DN No. 2.....	750 per unit (case)
Poetaz, DN No. 1.....	750 per unit (case)
Poetaz, DN No. 2.....	1250 per unit (case)
Leedsii, DN No. 1.....	500 per unit (case)

Hyacinths

REGULAR HYACINTHS

Blue

- Bismarck.** Light blue, very early forcer.
- Dr. Lieber.** Medium blue, early forcer.
- Grand Maitre.** Deep blue, medium forcer.
- King of the Blues.** Dark blue, late forcer.
- Ostara.** Violet blue, early forcer.
- Perle Brillante.** Clear blue, medium forcer.

White

- L'Innocence.** Pure white, very early forcer.

Red and Pink

- Gertrude.** Rosy pink, medium forcer.
- Jan Bos.** Scarlet, very early forcer.
- Lady Derby.** Light pink, medium forcer.
- La Victoire.** Rosy red, medium forcer.
- Marconi.** Bright pink, rather late forcer.
- Pink Pearl.** Rosy pink, very early forcer.
- Queen of the Pinks.** Bright, beautiful pink, for late forcing.

Yellow

- City of Haarlem.** Golden yellow, medium forcer.

Regular Hyacinths available in the following sizes:

	Per 100	Per 1000
19/up, 50 per unit (bag)	\$18.00	\$170.00
18/19, 50 per unit (bag)	16.00	150.00
17/18, 100 per unit (bag)	14.00	130.00
16/17, 100 per unit (bag)	12.00	110.00
15/16, 175 per unit (bag)	11.00	100.00
14/15, 200 per unit (bag)	10.00	90.00

PREPARED HYACINTHS

- L'Innocence.** Pure glistening white.
- Bismarck.** Light porcelain blue.
- Pink Pearl.** Bright, rosy pink.

Available in the following sizes:

	Per 100	Per 1000
19/up, 50 per unit (bag)	\$22.00	\$200.00
18/19, 50 per unit (bag)	20.00	185.00
17/18, 100 per unit (bag)	18.00	165.00

Delivery can be arranged in case lots from a location near you in most cases, if your order is placed 3 to 6 months before shipping time.

Holland Grown Iris

Van Vliet. Early dark blue. **Imperator.** Dark blue.
White Excelsior. Pure white. **Golden Harvest.** Yellow.

Prices above 4 varieties, each:	Per 1000	Per Case
6/7, 6000 bulbs per case.....	\$ 9.00	\$50.00
7/8, 4000 bulbs per case.....	13.00	50.00
8/9, 3000 bulbs per case.....	20.00	57.00

Yellow Queen. Pure yellow.

6/7, 6000 bulbs per case.....	13.00	75.00
7/8, 4000 bulbs per case.....	20.00	75.00

White Superior. Fine, new white.

6/7, 6000 bulbs per case.....	16.00	90.00
7/8, 4000 bulbs per case.....	25.00	96.00
8/9, 3000 bulbs per case.....	34.00	99.00

8/9 9/10 10/up

WEDGEWOOD. Light blue. Per 1000..\$14.00 \$22.00 \$35.00

Minimum order 1000 bulbs, 100 of any one variety.

F.O.B. Chicago (Case lots F.O.B. New York until August 15)

CROCUS Spring Flowering

	8/9	9/10	10/11
Blue and Purple	\$25.00	\$30.00	\$35.00
White	35.00	40.00	50.00
Yellow	40.00	50.00	60.00
Striped	25.00	30.00	35.00

CHIONODOXA (Glory of the Snow)

Per 1000

Alba. White.	\$22.00
Lucillae. Light blue.....	18.00
Sardensis. Deep blue.....	18.00

GALANTHUS (Snowdrop)

Per 1000

Nivalis Simplex. Single, pure white 5/6 cm.....	\$27.50
Nivalis Fl. Plena. Double, pure white. 4/5 cm.....	35.00

MUSCARI (Grape Hyacinth)

Per 1000

	8/9	9/10
Armeniacum. Bright blue.....	\$14.00	\$17.00
Early Giant. Blue.....	14.00	17.00
Heavenly Blue. Sky Blue.....	14.00	17.00

IXIA

If grown in pots in carnation house temperature will flower late February and early March. Colors are rich, varied, and beautiful.

Per 1000

Named Varieties	\$15.00
Mixed	14.00

IRIS COLLECTIONS

Delivery late September and October

F.O.B. Chicago (New York until August 15)

COLLECTION No. 1

To plant out in the South, or to plant in frames in the North (must cover with straw to bring them thru). Flower April to June, depending on location.

Quantity	Variety and Description	Size
1000	Van Vliet. Dark blue.	6/7
2000	Yellow Queen. Yellow.	5/6
1500	White Excelsior. White.	6/7
2000	Imperator. Dark blue.	6/7

6500 Bulbs (Collection)\$50.00

COLLECTION No. 2

To plant in field or frame, and in greenhouse for late flowering.

Quantity	Variety and Description	Size
1000	Imperator. Dark blue.	7/8
1000	Yellow Queen. Yellow.	6/7
1000	White Excelsior. White.	7/8
1000	Van Vliet. Dark blue.	7/8

4000 Bulbs (Collection)\$50.00

COLLECTION No. 3

For greenhouse forcing.

Quantity	Variety and Description	Size
1000	Imperator. Dark blue.	8/9
1000	Golden Harvest. Yellow.	8/9
1000	White Excelsior. White.	8/9

3000 Bulbs (Collection)\$57.00

SCILLA (Siberian Squill)

Per 1000

Siberica. Brilliant blue, 7/8.....	\$18.00
Siberica Alba. White. Top size.....	22.00
Siberica Spring Beauty. Large, light blue. 9/10.....	25.00

SCILLA COMPANULATA (Wood Hyacinth)

Top Size
Per 1000

Myosotis. Light blue.....	\$25.00
Rose Queen. Pink.....	18.00
White Triumphator. Pure white.....	25.00

Holland Bulb Collection

1125 BULBS FOR COUNTER SALES

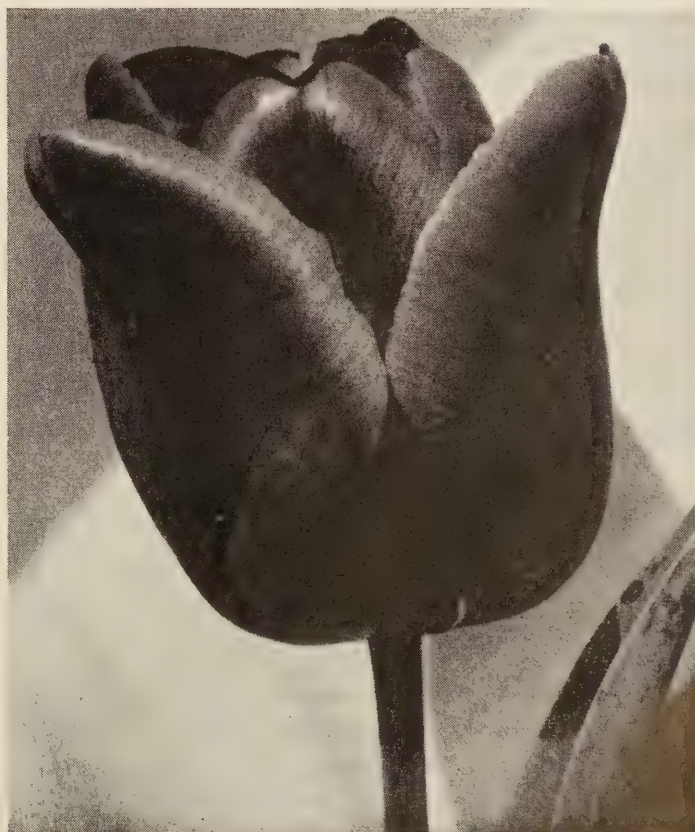
Early September Delivery

Order at once to be sure of delivery when your customers want them. Colored posters to help your sales come with each collection.

- 25 Hyacinths, **Blue.**
- 25 Hyacinths, **Pink.**
- 25 Hyacinths, **White.**
- 125 Tulips, **William Pitt.** Brilliant carmine.
- 125 Tulips, **Philip Snowden.** Deep rose.
- 125 Tulips, **All Bright.** Deep red.
- 125 Tulips, **Wm. Copeland.** Lavender.
- 125 Tulips, **Carrara.** Pure white.
- 125 Tulips, **Golden Harvest.** Lemon-yellow.
- 125 Tulips, **Rhineland.** Crimson, edged yellow.
- 25 Tulips, **Red Emperor.** Fiery scarlet.
- 25 Tulips, **Blue Parrot.** Dark lavender-blue.
- 25 Tulips, **Fantasy.** (Parrot.) Deep salmon, blotched green.
- 100 Daffodils, **King Alfred.** Golden yellow.

1125 Bulbs (Collection)\$54.00

Should any varieties be sold out when your order is received, we will substitute with equally good or better named varieties. F.O.B. Chicago (East Coast till July 15).



West Coast-Grown Bulbs

RANUNCULUS

September to February Delivery

F.O.B. California or West Chicago

Tecolote Giants. By far the largest and most magnificent strain of Ranunculus ever offered to the trade. Flowers are very double, blended with semi-double. Centers are usually light green.

Golden Yellow	Yellow Shades	Red Shades
Orange Shades	White Shades	Pink Shades

Prices, above separate colors:

	1 in.-Up	7/8-1 in.	3/4-7/8 in.	5/8-3/4 in.
Per 1000	\$77.50	\$60.00	\$40.00	\$27.50

Mixed Colors

	1 in.-Up	7/8-1 in.	3/4-7/8 in.	5/8-3/4 in.
Per 1000	\$75.00	\$52.00	\$35.00	\$25.00

Minimum order 100.

ANEMONE

September Delivery

Monarch de Caen. Single Poppy type.

	7/8 in.-Up	3/4-7/8 in.	5/8-3/4 in.	1/2-5/8 in.
Per 1000	\$52.00	\$42.00	\$27.00	\$11.00

St. Brigid. Creagh Castle, double.

Blue Poppy. Bright blue, single.

His Excellency. Bright scarlet, single.

The Bride. Pure white, single.

Rosea. Sylphide, fuschia-rose single.

Prices, above 5:

	7/8 in.-Up	3/4-7/8 in.	5/8-3/4 in.	1/2-5/8 in.
Per 1000	\$60.00	\$48.00	\$34.00	\$14.00

Minimum order 100, 250 at thousand rate.

AMARYLLIS

MIXED

	2 1/2-2 3/4 in.	2 3/4-3 in.	3-3 1/4 in.	3 1/2-4 in.
Per 100	\$25.00	\$30.00	\$40.00	\$45.00
Per 1000	225.00	275.00	375.00	425.00

SEPARATE COLORS—Crimson, Red, Scarlet, and Variegated Shades

	2 1/2-2 3/4 in.	2 3/4-3 in.	3-3 1/4 in.	3 1/2-4 in.
Per 100	\$35.00	\$40.00	\$50.00	\$60.00
Per 1000	325.00	375.00	475.00	575.00

NEAR WHITE

Per 100	50.00	55.00	60.00	70.00
---------	-------	-------	-------	-------

F.O.B. California

CALLAS

F.O.B. West Coast or West Chicago

AETHIOPICA (Large White)

August Delivery

	Per 100	Per 1000
1 1/4-1 1/2"	\$ 8.75	\$ 77.50
1 1/2-1 3/4"	15.50	145.00
1 3/4-2"	22.00	210.00
2-2 1/2"	28.50	275.00
2 1/2" up	32.00	300.00

GODFREY (Small White)

August Delivery

Very soft bulb. Shipment direct from California only. We will not be responsible for condition of bulbs on delivery.

	Per 100	Per 1000
1-1 1/4"	\$ 8.00	\$ 75.00
1 1/4-1 1/2"	16.00	150.00
1 1/2-1 3/4"	23.50	225.00
1 3/4" up	32.00	300.00

ELLIOTTIANA (Yellow)

November Delivery

	Per 100	Per 1000
1 3/4-2"	\$11.00	\$ 97.50
2-2 1/2"	17.50	165.00
2 1/2-3"	32.00	300.00
3" up	45.00	415.00

ALBA MACULATA

(White with Spotted Foliage)

November Delivery

	Per 100	Per 1000
1 3/4-2"	\$10.00	\$ 90.00
2-2 1/2"	16.00	150.00
2 1/2-3"	27.50	265.00
3" up	40.00	390.00

REHMANNI SUPERBA (Pink)

November Delivery

	Per 100	Per 1000
1 1/4-1 1/2"	\$11.00	\$100.00
1 1/2-2"	14.00	130.00
2-2 1/2"	20.00	180.00
2 1/2" up	27.50	265.00

ARUM PICTUM (Black)

July Delivery

	Per 100	Per 1000
1 1/2-2"	\$25.00	\$240.00
2-2 1/2"	37.50	337.50
2 1/2" up	45.00	415.00

BABY WHITE CALLA

September Delivery

	Per 100	Per 1000
Large size clumps	\$ 19.00	\$180.00
Medium size clumps	13.00	120.00

All prices in this catalog were in effect when we went to press. Decreases or increases will be adjusted at time of delivery.

West Coast Glad Bulbs

Our bulbs are hand dug, hand cleaned and graded, and are not mutilated or bruised by machinery. This costs us more, but it is your insurance of quality stock. Our stock is guaranteed true to name, and free from disease and thrip. Full size and

count, hand graded and selected. Sold under usual disclaimer. The following are the very finest varieties for commercial growing. Delivery January to May.

PINK and SALMON

	No. 1 1 1/2 in. up Per 1000	No. 2 1 1/4-1 1/2 in. Per 1000
Chamouny. Cerise-rose, silver edge.....	\$35.00	\$28.00
Daisy Mae. Orange-pink, cherry throat.....	35.00	28.00
Ethel Cave Cole. Light pink.....	35.00	28.00
Lipstick. Rosy pink.....	35.00	28.00
Miss Wisconsin. Clear rose-pink.....	35.00	28.00
Phantom Beauty. Light pink.....	35.00	28.00
Picardy. Shrimp-pink	35.00	28.00
Spic and Span. Ruffled deep pink, salmon shading	38.00	32.00
Tivoli. Soft rose-pink, lighter throat.....	38.00	32.00

LAVENDER and BLUE

Abu Hassan. Dark violet-blue.....	45.00	38.00
Blue Beauty. Medium blue.....	35.00	28.00
Elizabeth the Queen. Ruffled lavender.....	35.00	28.00
King Lear. Ruffled purple.....	35.00	28.00
Ravel. Violet, reddish brown throat.....	38.00	32.00

GLADIOLI COLLECTION

For Bulb Sales or Cut Flowers

Contains 250 No. 2 size bulbs each of the 8 popular varieties listed below. Colored pictures to help you sell bulbs come with each collection. Order now and be ready for those early spring sales. Delivery January to May.

Chamouny	Minuet
Dr. Bennett	Picardy
Ethel Cave-Cole	Snow Princess
Margaret Beaton	Yellow Emperor

1 Case of 2000 Bulbs (Collection).....\$56.00

WHITE, CREAM and YELLOW

	No. 1 1 1/2 in. up Per 1000	No. 2 1 1/4-1 1/2 in. Per 1000
Golden Arrow. Light yellow.....	\$45.00	\$38.00
Leading Lady. Cream-white sport of Picardy.....	35.00	28.00
Margaret Beaton. White, cherry throat.....	35.00	28.00
Pactolus. Ruffled buff with red blotch.....	45.00	38.00
Snow Princess. Milky white; light creamy blotch	35.00	28.00
Spotlight. Deep yellow with small scarlet blotch	38.00	32.00
Sunspot. Light apricot-buff.....	45.00	38.00
Yellow Emperor. Rich yellow.....	38.00	32.00

RED

Beacon. Salmon-scarlet, cream throat.....	35.00	28.00
Burma. Deep rose-red, ruffled.....	35.00	28.00
Nancy. Bright scarlet-red; extra fine.....	38.00	32.00
Red Cherry. Red scarlet.....	45.00	38.00
Valeria. Light red	35.00	28.00

MIXTURE

Florists' Mixed. Well balanced.....	35.00	28.00
--	-------	-------

F.O.B. West Chicago or West Coast. Minimum order 500 bulbs; 100 of a variety. 250 or more of any one variety at 1000 rate. Cash with order, or 25% deposit will hold bulbs until shipment is wanted, providing it does not exceed May 1st, unless other provisions are made. Field and storage are State inspected. All bulbs offered are subject to prior sale, so, if out of any variety, we will substitute with one equally good or better unless instructed otherwise. All shipments will be made by express collect.

FREESIAS

August-September Delivery

TECOLOTE HYBRIDS

Flowers of immense size, wide open and delightfully fragrant. Plants of unusual strength and vigor. Tall strong stems. Much finer than the standard commercial varieties.

Talisman (Pat. #555). Bright orange-pink; rich cream throat.

Pure White	Bright Red	Pink
Light Yellow	Lavender	Orange
Rose	Finest Blue	Mixture

Other Giant Hybrids

Mammoth White. Giant large, pure white blooms. Very early.

Mammoth Yellow. Similar to Giant Imp. Golden Daffodil. Very early.

Elder's Golden Giant. Bright golden yellow. Large, wide open flowers. Tall.

Oriole. Fine, deep golden orange. Earliest to bloom.

Standard Commercial Varieties

Achievement. Dark golden yellow with dark orange throat.

Blondies. Mixture of platinum to gold. Very early. Large flowers.

Golden Wonder. Large, clear yellow.

Judy Double Yellow. Large double yellow.

Blanche Blue. Fine, large blue.

Elder's Giant White. Late blooming.

Elder's Double White. Large, double white.

Flo. Large flowering deep blue.

Rosy Morn. Large rose.

Sunset. Golden orange-yellow.

Above Freesias available in the following sizes:

	1/2 - 5/8 "	5/8 - 3/4 "	3/4 - 7/8 "	7/8 " - Up
Per 100	\$ 2.00	\$ 3.00	\$ 4.50	\$ 5.00
Per 1000	\$17.00	\$24.00	\$37.50	\$45.00

Rainbow Mixture. Mixture of all colors.

	1/2 - 5/8 "	5/8 - 3/4 "	3/4 - 7/8 "
Per 100	\$ 1.50	\$ 2.50	\$ 4.50
Per 1000	\$12.00	\$20.00	\$37.50

Minimum order 100. F.O.B. California or Chicago.

American-Grown Bulbs

FANCY LEAVED CALADIUMS

For Pot Plants, Cutting and Garden

Candidum. Leaf snow white with green veins and network. Narrow green border.

Stoplight. Leaf shining crimson with bluish tint.

W. B. Haldeman. Medium leaf of bright pink with narrow green edge.

John Peed. Shining bright metallic red center on moss green ground.

Lady in Red. Fine dwarf, shining red leaf, with bronzy hue.

Exposition. Leaf bright red; dark green edge.

Macahyba. Dark moss green leaf, spotted lilac, with scarlet ribs.

Red Flare. Similar to Scarlet Pimpernelle; blotched with two shades of green.

Crimson Wave. Deep green leaf with crinkled, transparent crimson center.

Red Ensign. Dwarf. Leaves of metallic red with narrow green border.

Mrs. F. Sander. Dark green leaf, heavily blotched transparent deep rose.

Pink Cloud. Large, crinkly leaves of mottled pink with cloud-like effect.

Fire Nymph. Light green, mottled with shades of bright pink and straw color.

Reconcavo. Delicate rose center with carmine ribs.

Red Glory. Deep carmine with heavy scarlet ribs and narrow green edge.

Richard Deckard. Coppery rose with crimson ribs, blotched pink.

Assorted.

Available in the following sizes:	Per 100	Per 1000
3 1/2 in. up—Mammoth	\$45.00	\$400.00
2 1/2-3 1/2 in.—Jumbo	35.00	300.00
1 1/2-2 1/2 in.—No. 1	25.00	200.00
1-1 1/2 in.—No. 2	12.00	100.00

All Caladium tubers shipped f.o.b. Florida. Minimum order 50 bulbs.



Caladiums make ideal pot plants and are fine for cutting and outdoor bedding in partial shade.

CANNAS

Quality 3- to 5-eye divisions for delivery December through spring.
F.O.B. Shipping Point

The President. This variety is extremely popular. Double flowering, rich red clusters 7 to 10 inches in diameter, 8 to 10 inches long. Heavy green foliage. Dwarf, 2 1/2 to 3 1/2 ft. high.

Red King Humbert. A remarkable Canna, a favorite for years. Large scarlet-red flowers 6 to 7 inches in diameter. Bronze foliage. Broad, tropical leaves. 3 1/2 to 4 ft. high.

Yellow King Humbert. An old favorite, considered one of the best yellow Cannas. Flowers are yellow, blotched with red. Petals are large, measuring from 4 to 5 inches in diameter. Foliage is a light green. Medium height, 3 to 4 ft.

City of Portland. Fine pink flowers that hold their color through hot, dry periods. Clusters measure 4 to 5 inches in diameter. Attractive deep green foliage. 3 1/2 ft. high.

Prices above Cannas, each: \$6.00 per 100, \$55.00 per 1000. Minimum Order 100, 50 of a variety. 250 at 1000 rate. Shipping boxes hold 200 Divisions. F.O.B. shipping point.

IMPORTED FROM FRANCE

August-September Delivery

Case lots F.O.B. New York or West Chicago. Less than case lots F.O.B. West Chicago.

LILIUM CANDIDUM

	Per 100
22/24 cm. (8/9)	\$22.00
24/26 cm. (9/10)	26.00
26/28 cm. (10/11)	30.00

FRENCH ROMAN HYACINTHS

White	Pink	Per 1000
13/14 cm.		\$95.00
Blue		
13/14 cm.		50.00
14/15 cm.		60.00

NARCISSI

PAPER WHITES

	Per 1000
13/14 cm.	\$58.00
14/15 cm.	65.00

GRAND SOLEIL D'OR

American Grown

	Per 1000
14/15 cm.	\$50.00

Tuberous Rooted Begonias—Gloxinias



Tuberous-Rooted Begonias.

BELGIAN GROWN BEGONIAS

Delivery December-January

DOUBLE CAMELLIA FLOWERED

Scarlet	Salmon	Crimson	White	Yellow	Orange	Copper	Mixed	Rose
			1 1/4-1 1/2 in.		1 1/2-2 in.			2 in. Up
Prices:			\$ 7.50		\$ 12.50			\$ 17.50
Per 100								
Per 1000			60.00		100.00			150.00

Minimum order 50 bulbs. F.O.B. West Chicago.

GLOXINIAS

Delivery December and January

Emperor William. Violet bordered white.
Emperor Frederic. Scarlet bordered white.
King of the Reds. Red.
Etoile de Feu. Brilliant red.
Princess Elizabeth. Blue with white throat.
Blanche de Meru. Rose with white throat.
Violacia. Violet.
Queen Wilhelmina. Pink.
Mont Blanc. White.
Mixed. All above colors.
Prices: 1 1/4-1 1/2 in. 1 1/2-2 in. 2 in. Up
 Per 100 \$10.00 \$ 17.50 \$ 25.00
 Per 1000 80.00 155.00 225.00
 Minimum order 50 bulbs. F.O.B. West Chicago.

AIR FREIGHT (For Early Delivery)

Belgian grown Gloxinias and Tuberous Rooted Begonias are shipped direct to New York by air freight at an additional cost. November and early December delivery.
 Minimum order 250 bulbs. F.O.B. New York.

AMERICAN GROWN

BEGONIAS

Delivery January and February

DOUBLE CAMELLIA FLOWERED

White	Yellow	Scarlet	Light Salmon
Blush	Apricot	Dark Salmon	Crimson Rose
Pink	Orange	Cardinal Red	American Beauty
Rose	Dark Red	Flame Orange	

DOUBLE FIMBRIATA

White	Rose	Orange	Salmon
Blush	Yellow	Dark Red	Red Salmon
Pink	Apricot	Scarlet	Dark Salmon
Cardinal Red	Crimson Rose	Flame Orange	

DOUBLE PICOTTEE

Pink	Rose	Salmon	Apricot	Red
------	------	--------	---------	-----

DOUBLE HANGING BASKET

White	Yellow	Pink	Scarlet	Red
Rose	Apricot	Salmon	Orange	

GIANT SINGLE FRILLED

White	Yellow	Pink	Scarlet	Rose
Dark Red	Salmon	Apricot	Orange	Fascination
Prices:	1 1/4-1 1/2 in.	1 1/2-2 in.	2 in. Up	
Per 100	\$ 9.50	\$ 14.50	\$ 19.00	
Per 1000	85.00	135.00	180.00	

Minimum order 50 bulbs. F.O.B. California or West Chicago.

GLOXINIAS

Delivery January and February

Emperor William. Violet bordered white.
Emperor Frederic. Scarlet bordered white.
Roi des Rouges. Dark crimson.
Etoile de Feu. Scarlet
Princess Elizabeth. Blue with white throat.
Blanche de Meru. Rose with white throat.
Violacia. Soft violet.
Prince Albert. Dark violet.
Mont Blanc. White.
Tigrinia. Spotted and netted.

Prices:	1 1/4-1 1/2 in.	1 1/2-2 in.	2 in. Up
Per 100	\$ 17.00	\$ 25.00	\$ 32.00
Per 1000	150.00	225.00	300.00

Minimum order 50 bulbs. F.O.B. California or West Chicago.

TUBEROUS BEGONIA and GLOXINIA COLLECTION

Belgian Grown

Delivery January to March

F.O.B. West Chicago

All bulbs in this collection should be started in a minimum night temperature of 70° to be finished in 5 or 6 inch pots. These bulbs are ideal for bedding in partial shade, and you should have bulbs available for counter sales.

Each unit contains:

150	Tuberous Rooted Begonias.	1 1/2-2 inch.	Assorted.
100	Gloxinias.	1 1/2-2 inch.	Assorted.
250	Bulbs (Collection)		\$33.50

See page 30 for notes on Tuberous Begonia and Gloxinia culture.

Dahlias

Delivery March-April-May 1953

LARGE FLOWERING DAHLIAS

	Per 10	Per 100
A. D. Livoni (Show type). Clear rose pink.....	\$2.00	\$15.00
Avalon (Dec.). Clear sulphur yellow.....	2.00	15.00
Commando (Dec.). Dark lavender.....	3.00	24.00
Exquisite (Dec.). White with a touch of lavender.....	3.00	24.00
Francis Larocco (Dec.). Pale sulphur yellow....	2.75	22.00
French Buff (Dec.). Buff; a good cut flower	2.75	22.00
Gallant Fox (Dec.). Dark red.....	2.35	18.00
Jane Cowl (Dec.). Buff, blending to apricot...	2.75	22.00
Jean Kerr (Show type). Medium sized pure white.....	2.35	18.00
Jersey's Beauty (Dec.). Beautiful pink.....	2.75	22.00
Kentucky (Dec.). Salmon Jersey Beauty.....	2.75	22.00
Marshall's Pink (Dec.). Soft pink.....	3.00	24.00
Michigan White (Dec.). Fine commercial white	3.00	24.00
Mrs. I. de ver Warner (Dec.). Large lilac rose..	2.75	22.00
Pink Flamingo (Cactus type). Clear pink with yellow undertone.....	4.00	36.00
Pride of California (Dec.). Vivid red.....	3.00	24.00
Red Jersey Beauty (Dec.). Commercial red...	2.75	22.00
Rosy Dawn (Ball type). Yellow, tipped rose...	3.00	24.00
Sanhican's Monarch (Informal Dec.). Deep rose, lighter edge.....	3.00	22.00
The Commodore (Dec.). Large rich yellow....	2.35	18.00
Thomas A. Edison (Dec.). Royal purple.....	4.75	42.50
White King (Dec.). Florist white.....	2.35	22.00
Mixed Colors.	2.00	15.00

POMPON DAHLIAS

Amber Queen. Autumn shade.....	1.75	12.00
Arthur Kerley. Bright red.....	2.00	15.00
Bronze Beauty. Buff to rich bronze.....	1.75	12.00
Edith Mueller. Gold and orange-red.....	2.00	15.00
Gertrude. Crimson red.....	2.35	18.00
Joe Fette. Medium sized, pure white.....	2.35	18.00
Little David. Russet orange.....	2.35	18.00
MacKay's Purity. Very fine white.....	2.35	18.00
Morning Mist. White, tipped lavender.....	2.00	15.00
Rosa Wilmouth. Fine bright red.....	2.35	18.00
Rothout. Bright red.....	2.00	15.00
Sylvia. Scarlet red.....	2.35	18.00
White Fawn. Waxy white.....	2.00	15.00
Yellow Gem. Finest, deep yellow.....	2.35	18.00

F.O.B. Shipping point. Minimum order 100, 10 of a variety.

PEONY COLLECTION

25 each of the following varieties:

- ***Baroness Schroeder** (Late). White.
- ***Felix Crousse** (Midseason). Brilliant red.
- ***La Lorraine** (Midseason). Cream white.
- ***Mons. Jules Elie** (Early). Deep pink.
- ***Richard Carvel** (Early). Brilliant red.
- ***Sarah Bernhardt** (Late). Apple blossom pink.

1 Collection (150 Divisions).....\$80.00

Peonies

Fall—1953

September 15 to Mid-November Delivery

The best grade of strong 3 to 5 eye divisions available. All shipments F.O.B. shipping point by express collect. Minimum order 50 divisions, 10 of a variety. We will substitute varieties as good or better for any that may not be available unless your order is marked "no substitutions." Write for prices for 1000 or more.

WHITE

	Per 10	Per 100
A. B. Franklin (Midseason). White.....	\$12.00	\$100.00
* Avalanche (Midseason). White.....	7.00	60.00
* Baroness Schroeder (Late). White.....	7.00	60.00
* Elsa Sass (Late). White.....	20.00	175.00
Festiva Maxima (Early). White, red center.	6.50	55.00
Frankie Curtis (Midseason). White.....	8.00	70.00
Kelways Glorious (Midseason). White.....	15.00	125.00
* La Lorraine (Midseason). Cream white....	8.00	70.00
Le Cygne (Early). Milk white.....	15.00	125.00
Mary B. Voires (Late). White.....	7.00	60.00
* Mother's Day (Midseason). White.....	20.00	150.00
Moonstone (Midseason). Cream white.....	60.00	550.00
Myrtle Gentry (Late). White.....	12.00	100.00
* Plymouth (Very late). White.....	17.50	140.00
Solange (Late). Cream white.....	7.00	60.00

PINK

* Alice Reed Bates (Midseason). Medium pink.....	20.00	175.00
Grace Babson (Late). Deep pink.....	8.00	70.00
Hansina Brand (Late). Pink white.....	17.50	135.00
John Deegar (Late). Pink.....	8.00	70.00
* Lady Kate (Late). Orchard pink.....	8.00	70.00
Lake of Silver (Late). Pink.....	7.00	60.00
Lillian Gumm (Late). Shell pink.....	7.00	60.00
Loren Franklin (Late). Deep bright pink....	12.00	100.00
Martha Bullock (Midseason). Rose pink....	8.00	70.00
Minuet (Late). Pink.....	9.00	80.00
* Mons. Jules Elie (Early). Deep pink.....	7.00	60.00
* Mrs. F. D. Roosevelt (Midseason). Shell pink.....	25.00	200.00
Nancy Dolman (Late). Medium pink.....	8.00	70.00
Pres. F. D. Roosevelt (Late). Pink.....	15.00	125.00
* Sarah Bernhardt (Late). Apple blossom pink.....	7.00	60.00
Walter Faxon (Midseason). Salmon pink....	7.00	60.00

RED

* Augustin D'Hour (Midseason). Red.....	7.00	60.00
* Felix Crousse (Midseason). Brilliant red....	6.00	50.00
Inspector La Vergne (Midseason). Red....	7.00	60.00
Karl Rosenfield (Midseason). Dark red.....	8.00	70.00
Mary Brand (Midseason). Deep red.....	9.00	80.00
Onondago (Midseason). Red.....	15.00	125.00
* Richard Carvel (Early). Brilliant red.....	8.00	70.00
Rosalie (Midseason). Rose red.....	7.00	60.00
Sir John Franklin (Late). Red.....	20.00	160.00

YELLOW

Laura Dessert (Midseason). Yellow.....	8.00	70.00
---	------	-------

*Preferred varieties for cut flowers.

Variety Recommendations

We recommend the following list of Hyacinths, Tulips, Daffodils, Iris, and Lilies for the main flowering periods. Varieties may vary with the demand in your locality, depending on your past experience.

	JANUARY FORCING	VALENTINE'S DAY	MARCH FORCING	EASTER CROP	MOTHER'S DAY
HYACINTHS (Pages 22, 23, 27)	<p>(Prepared)</p> <p>Pink Pearl } Early L'Innocence } Jan. Bismarck }</p> <p>(Regular)</p> <p>Pink Pearl } Late L'Innocence } Jan. Bismarck }</p>	<p>L'Innocence Pink Pearl Bismarck Marconi La Victoire Grand Maitre Perle Brillante</p>	<p>L'Innocence Pink Pearl Bismarck Marconi Grand Maitre Perle Brillante Dr. Lieber La Victoire</p>	<p>L'Innocence Pink Pearl Bismarck Marconi Grand Maitre Perle Brillante La Victoire Queen of the Pinks King of the Blues</p>	
TULIPS (Pages 17, 20, 21, 23)	<p>Single Early Brilliant Star General De Wet Ibis Fred Moore</p> <p>Mendel Krelage's Triumph White Sail</p> <p>Darwin Rose Copeland Wm. Copeland</p> <p>(Amer. Grown Pre-cooled)</p> <p>Darwin Red Pitt Wm. Pitt Utopia Rose Copeland</p> <p>Cottage Albino Golden Harvest</p>	<p>Single Early Gen. De Wet</p> <p>Mendel Olaf Weber Krelage's Triumph Van der Erden White Sail</p> <p>Darwin Bartigon } Amer. P. Snowden } Stock Wm. Pitt Red Pitt Rose Copeland</p> <p>Cottage Golden Harvest Albino</p> <p>Double Early Mr. Van der Hoeft Peach Blossom Orange Nassau Electra</p> <p>Triumph Denbola</p>	<p>Mendel Van der Erden Olaf</p> <p>Darwin Bartigon Campfire P. Snowden Rose Copeland Insurpassable Princess Eliz. Wm. Pitt Red Pitt</p> <p>Cottage Golden Harvest Albino Carrara</p> <p>Triumph Korneforos Alberio Denbola</p>	<p>Darwin Bartigon Wm. Pitt Red Pitt Princess Eliz. Campfire P. Snowden Prunus Niphotos</p> <p>Cottage Carrara Albino Golden Harvest</p> <p>Double Early Mr. Van der Hoeft Peach Blossom Orange Nassau Electra</p> <p>Triumph Korneforos Crater Alberio Denbola</p>	<p>Darwin Bartigon Campfire Insurpassable Charles Needham Far. Sanders Niphotos</p> <p>Cottage John T. Scheepers Belle Jaune Rosabella G. W. Leak Albino</p>
DAFFODILS (Pages 17, 22, 23)	<p>(Dec. and Early Jan., Pre-cooled)</p> <p>King Alfred Golden Harvest Rembrandt (Pots) (Late Jan., regular American)</p>	<p>(American or Holland grown)</p> <p>Trumpet King Alfred Rembrandt Golden Harvest</p> <p>Poetaz Laurens Koster</p> <p>Double Texas</p>	<p>(American or Holland grown)</p> <p>Trumpet King Alfred Rembrandt Mrs. Krelage Qu. of Bicolors Romaine</p> <p>Poetaz Cheerfulness</p> <p>Double Texas</p>	<p>(American or Holland grown)</p> <p>Trumpet King Alfred Rembrandt Qu. of Bicolors Romaine Mrs. Krelage</p> <p>Poetaz La Fiancee Cheerfulness</p> <p>Double Texas Twink</p>	
IRIS (Pages 17, 24)	<p>Wedgewood (Dec.-early Jan., Amer. Pre-cooled, 9/10 and 10/11)</p>	<p>Wedgewood (Amer., Regular, 9/10 and larger. Holland, 9/10, 10 up</p>	<p>(American or Holland grown)</p> <p>Wedgewood, 8/9, 9/10 Imperator, 8/9 Wh. Excelsior, 8/9 Yel. Queen, 7/8 D. Haering, 8/9 Gold. Harvest, 8/9 Wh. Superior, 8/9</p>	<p>(American or Holland grown 7/8)</p> <p>Imperator White Excelsior Yellow Queen D. Haering Golden Harvest White Superior</p>	<p>(American or Holland grown 7/8)</p> <p>Imperator White Excelsior Yellow Queen D. Haering Golden Harvest White Superior</p>
LILIES (Pages 18, 19)	<p>Rubrum Album</p>	<p>Erabu Georgianna</p>	<p>Croft Georgianna Giganteum Erabu</p>	<p>Pots Croft Ace</p> <p>Cutting Georgianna Croft Erabu Regale Estate Giganteum</p>	<p>Croft Regale Estate Erabu Giganteum</p>

Notes on Bulb Culture

SUGGESTIONS FOR CROFT LILY FORCING

The bulbs should be potted as soon as received from cold storage. Nothing is gained by placing them in pots larger than 6 inch unless the bulbs are unusually large. The potting soil should be low in nitrates. The use of old Chrysanthemum soil is not advocated because high nitrates inhibit root action. The incorporation of superphosphate at the rate of a 4 inch pot per wheelbarrow (2½ bu.) is desirable. After potting water well and place pots beneath bench until roots are formed. They should be well-formed by the last week in December. When placing pots on the bench water well. Some authorities recommend keeping them definitely on the dry side until the bud is formed, when watering is increased. Others advise watering freely, as limiting the water used tends to dwarf the plant and reduce flower size as well as favor bud-blasting. Syringing with water during the growing season is beneficial according to some forcers, but avoid allowing water to stay in the leaf cluster at the top of the plant when the buds are just visible, as there is danger of inducing bud rot.

Croft Lilies develop exceptionally large foliage and unless given adequate space the lower leaves will turn yellow and become unsightly. Space so that the leaves barely touch each other. Regular fertilizing when the plants are 4-5 inches high, with either a complete fertilizer or nitrogenous fertilizers such as ammonium sulfate, nitrate of soda, etc., prevent the yellowing of lower leaves due to nitrogen deficiency. Failure to fertilize every 2 to 3 weeks will produce a plant with light-colored foliage. Neil Stuart states: "We feed our plants when they are a few inches tall, about a month later, and again, before flowering, using a complete fertilizer such as 5-10-5 at the rate of a teaspoonful per pot. If applied as a liquid, from 1 to 2 pounds of 5-10-5 plus a pound of nitrate of soda or sulfate of ammonia per 100 gallons of water is satisfactory when about half pint per pot is applied."

When the buds are just visible, it requires about 5 weeks until maturity at 60° F. You should be able to count the buds 42 days before Easter. When the buds bend over from their upright position it requires 2 weeks at 60° F. Some advise reducing the temperature one week before sale to harden the plants.

In case the plants are late, they may be forced more rapidly by raising the temperature as high as 80-90° F., but it is essential to maintain high humidity, by frequent syringing to keep the plant growing properly. Watering with 70-80° F. water hastens development of the buds. Be careful in using cold water as too sudden a change in temperature often causes lower leaf drop. The use of 100-watt bulbs suspended 2 feet above the tops of the plants, spaced 4 feet apart from 4-6 hours after sundown is also beneficial for extra heavy forcing. Don't stop growth at any time. Keep them coming, slowly if necessary. When growth of Croft is stopped, it is slow to start again.

Aphids are a serious pest on Lilies in that they spread mosaic and may cause splitting of the bud with heavy infestations. They are readily controlled with nicotine, Vaportone, or various other sprays. See planting schedule on page 18.

TUBEROUS ROOTED BEGONIAS

For early flowering, place tubers during January and February in a warm place in open trays. Moisten slightly once in

a while until they have come to life. As they begin to sprout, plant in flats in a mixture of peat and sand, leaf mold and sand, or peat alone—all of which are good mediums for developing a root system. Plant tubers 3 to 4" apart so they are a half inch below the surface. Keep uniformly moist but not too wet, in a warm place, well lighted, until 3 or 4" of growth develops. Then plant in a permanent location or 4" pots, 5" if large bulbs are used.

The front of the plant is always where the tips of the leaves are pointing. Often if dormant tubers are planted in open ground, especially if it is too cold or wet, a number of them may rot and the planting will be uneven, with some coming earlier and some later, with the plants facing in haphazard ways. Started first in flats, they will develop a splendid root system which is necessary for the forming of fine plants.

POTTING SOIL: Use a soil mixture of ⅔ coarse leaf mold or well rotted compost and ⅓ sand and sandy loam top soil, plus the addition of some granulated charcoal and cottonseed meal or bonemeal. They need a light, coarse, well mixed soil. When the plants need shifting into large pots, use the same soil mixture.

FEEDING: If well grown specimens are desired, additional feeding will be required, either with fish or cottonseed meals, both of which will give fine results. The best method of using these fertilizers is to mix with the soil that goes into the lower half of the pot, so that the roots will gradually reach into this area. If planting outdoors, a heaping tablespoonful for small plants and two for large plants will be sufficient when placed in the lower half of the planting hole. In pots, a tablespoonful for a 6" pot or a small handful for an 8" pot will be enough to carry the plants thru the season. See that the fertilizer does not come into contact with the stem or the leaves, as this may cause a burn and attack the growing tissues of the plant.

An outside planting can be made in May, preferably in loose soil and shaded for several days after planting. Space plants about 8" apart. A small amount of fertilizer added in July will stimulate growth and flowers. Location should be in partial shade.

WATERING: After transplanting, gentle overhead watering is best until the plants are well established. Too heavy watering during the young stage may pack the soil, keeping it too wet, thereby causing the soil to go sour. Later when the plants are in full growth, they will require a steady supply of moisture as the root system is shallow and any drying out will give a setback to normal development.

Sizes of pots to be used for various size bulbs:

Bulb size 2" up—minimum 8" or 9" pot.

Bulb size 1½-2"—use a 7" pot.

Bulb size 1¼-1½"—use a 6" pot or smaller.

An ideal window box for the north side of a house can be planted up with double Tuberous Rooted Begonias, Caladiums and variegated Vinca vines.

GLOXINIAS

Culture and soil should be about the same as for Tuberous Rooted Begonias except they like more heat and humidity. The average temperature about 70°. Very little shade except just after re-potting. Humid atmosphere must be kept at all times.

NOTES ON BULB CULTURE—Continued

FORCING HYACINTHS

When Hyacinth bulbs are received they should be unpacked immediately. The bulbs should be carefully spread out on trays. Keep them as dry as possible and in a well-ventilated room between 55 and 60° until potted.

Potting for early forcing should be done as soon as possible after the bulbs are received. For later forcing, bulbs should be potted about 3 months before forcing. Use a light, porous soil mixture—sterilized soil is best. If planted in beds, cover the bulbs with 4 to 6 inches of soil. Immediately after potting, place in a bulb cellar or bury out-doors in a shaded location under 6 inches of sandy soil covered with a straw mulch so they won't freeze. During this storage period, Hyacinths make their root system which is necessary before forcing starts. Ideal temperature for storage after planting is around 50°. They should be watered regularly.

As soon as the root system is well established and the growth is well above the pots, they can be moved into a 65 to 75° location for forcing. Until foliage is well out and buds are showing, the plants should be kept in a fairly dark place. During the last 10 days or 2 weeks the plants should be moved out into the light and a cooler temperature for proper coloring of the flowers. Thruout this forcing period, Hyacinths should be kept warm and moist with frequent waterings.

Approximately a month of forcing is required to bring Hyacinths into flower during December, January, February and March. 3 weeks will suffice for Easter.

Prepared Hyacinths have been treated with heat either in the fields when the bulbs are produced or immediately after digging so that the flower bud emerges quicker than normal. Prepared Hyacinths are forced exactly the same as outlined above except that they can be brought out for forcing sooner—by December 1st or earlier.

Top size bulbs should be used for forcing.

FORCING TULIPS

Tulip bulbs for forcing should be planted in benches, flats or pots as soon as possible after receiving them. If not possible to plant immediately, they should be taken out of containers and spread out in a cool (48° is ideal) dry location. Bulbs give off heat and are apt to "heat" if allowed to remain in bags. Bulbs should be grown at 48° from planting time. Plant in a loose, well drained soil, preferably sterilized. Water regularly so the soil is never allowed to become dry.

As soon as the shoots emerge from the ground occasionally spray with a Fermate solution of 1 lb. to 100 gal. of water. This will control fungous diseases that may destroy foliage. Free ventilation and care not to wet foliage also helps prevent the spread of diseases.

Varieties vary in the time required for forcing. The following table shows the principal varieties used and the dates to begin forcing and the date of expected flowering. Forcing consists of raising the temperature to 55° for 2 weeks and then increasing to 60°. Forcing temperatures should not be allowed to go much above 60° any time. These temperatures should be maintained uniformly day and night.

Pre-cooled bulbs have been specially treated by storage at about 48° so that the stem and flower buds elongate within the bulb. With this treatment earlier flowering is possible.

Variety	PRE-COOLED BULBS		REGULAR BULBS	
	Begin Forcing	Flowering Date	Begin Forcing	Flowering Date
Albino	Dec. 5	Jan. 5	Dec. 14	Jan. 21
Golden Harvest	Dec. 15	Jan. 15	Dec. 21	Feb. 1
Red Pitt	Dec. 20	Jan. 20	Jan. 1	Feb. 10
Rose Copeland	Dec. 10	Jan. 10	Dec. 21	Feb. 1
Wm. Copeland	Dec. 10	Jan. 10	Dec. 21	Feb. 1
Wm. Pitt	Dec. 20	Jan. 20	Dec. 31	Feb. 10
Utopia	Dec. 27	Jan. 27	Jan. 7	Feb. 17
Bartigon	Dec. 26	Feb. 5	Jan. 15	Feb. 20

Most Cottage or Darwin varieties are suitable for forcing. The Single Early and Mendel varieties flower earlier but don't produce as good quality flowers.

Best results are obtained by using large sized bulbs.

FORCING DAFFODILS

Bulbs should be unpacked and planted as soon as received; planting should be as close together as possible—"bulb on bulb." Particularly pre-cooled bulbs will be delayed considerably in flowering by allowing the bulbs to remain in their cases for even a few days. Daffodils prefer a loose, well drained soil, preferably sterilized. Bulbs should be grown at 48° (either in a bulb cellar, out-doors or in greenhouse bench) until the shoot is at least 3 inches long—longer for later forcing does no harm. Forcing consists of raising the temperature to 60° for 3 weeks and then to 65°. This temperature should be maintained uniformly day and night.

American-grown Daffodil bulbs are best for mid-winter forcing. For earliest forcing, pre-cooled bulbs are recommended. Dutch bulbs may be used for late winter and spring flowering. King Alfred, American grown Double Nose No. 1, pre-cooled, is the generally accepted extra early forcing variety. These bulbs can usually be forced beginning the end of November. If not pre-cooled, forcing usually can be started about Dec. 15.

FORCING WEDGEWOOD IRIS

WEDGEWOOD: American stock and the largest bulb possible should be used for pre-cooling and early forcing. The smaller size bulbs should be used for later flowering in both pre-cooled and regular. The sizes available today are: 8½/9, 9/10, 10/11 and very few 11/up.

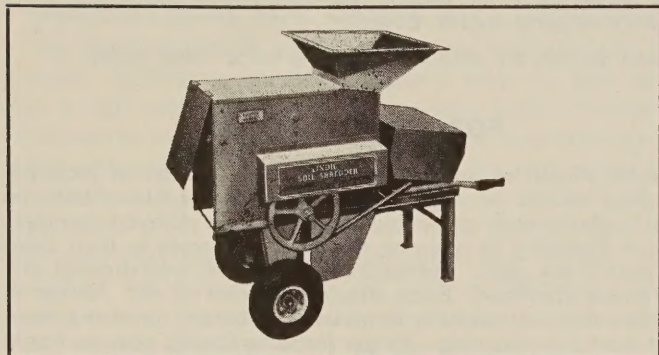
PRE-COOLING: Bulbs must be pre-cooled a minimum of 5 weeks in a constant temperature of 50° with a relative humidity of 70% or more. Bulbs should be turned or moved each week so that the cool air will reach all bulbs in the bag or in the case. They should be planted immediately as taken from cold storage in as cool a soil as possible and grown for 10 days to 2 weeks in a temperature between 50 and 55°. Gradually increase the temperature to 60° for best results.

PLANTING: Iris can be planted in pots, flats or benched direct. Have a minimum of 4 to 5" of soil so there is ample room for development of the root system. Spacing can be approximately 2 x 4 or 3 x 4 for early planting. The later the planting the closer they are spaced. The early planted stock will have very heavy and strong foliage that will require more room to prevent them from going blind. The preferred method of planting is to thoroughly soak the bench and push the bulbs into the soil, putting on a covering of soil or peat approximately ½ or 1"—then re-water again so the bench is thoroughly wet. Iris roots will not develop satisfactorily if the soil is allowed to dry out during the first few weeks.

WATERING: Do not allow your Iris bulbs to dry out from the time they are planted until the crop has been harvested. The temperature of the water used should be as near the air temperature in which you are growing your Iris, as possible. It is a severe shock to the crop if grown in approximately 60° to water with temperatures of 50° or less. The temperature of the water has caused a great deal of difficulty in early forcing.

CUTTING IRIS: Usually Iris are pulled—pulling the bulbs out of the soil or the maximum stem length from the bulb. They should be put in water immediately if going to the market the following day. If you wish to hold them a few days, put in a refrigerator in a temperature of 45 to 48° without water. At the time you wish to use them bring them out and put them in water the night before and they will open up very nicely for you. Most growers prefer to cut Iris when ¾ of an inch of color is showing on the bud.

Florists Supplies



LINDIG SOIL SHREDDERS

Model B

	Without Power	With 3/4 H.P. Electric Motor	With 1 H.P. Electric Motor
Model 1B-4	\$130.00	\$195.00
Model 1B-6	135.00	200.50
Model 2B-6	160.00	225.50	\$247.50
Model 2B-8	175.00	262.50

Model JR-B

Model JR-B without power	\$ 95.00
Model JR-B with 1/3 h.p. motor	136.00
Model JR-B with 1/2 h.p. motor	152.00
Motors complete with switch and six feet of cord.	
With gas engines	151.50

All prices and specifications are subject to change without notice.

All prices F.O.B., St. Paul, Minn.

PLASTICS for STERILIZING COVERS

FUMICOVER (Black)

Roll Size	Price Per Roll
100 x 10 ft.....	\$32.00
100 x 13 ft.....	42.50
150 x 6 1/2 ft.....	32.00
150 x 10 ft.....	45.00

VISQUEEN (Clear)

Roll Size	Price Per Roll
100 x 10 1/2 ft.....	\$35.00
100 x 16 ft.....	52.75

Additional lengths can be ordered in multiples of 50 ft. only. F.O.B. Binghamton, New York.

CLOTH

FOR SHADING

	Sewed Per Sq. Yd.	Not Sewed 3 ft. Width Per Sq. Yd.
Super American Black Sheen. Reliable, and will give up to 8 years perfect shading if properly cared for. Sewed with Orlon.	\$0.66	\$0.60

FOR CLOTH HOUSES

Storm King Aster Cloth.....	.22	.18
Green Saran Cloth.....	.45	
Natural Saran Cloth.....	.65	

Cloth can be supplied, unsewed or sewed, in 3 ft. widths or multiples of 3 ft. only, any length you want. F.O.B. mills. Allow 3 to 6 weeks for delivery.

LABELS

Our product is manufactured from selected soft white pine lumber and is guaranteed to meet all the requirements of the nursery and florist industries. Prices F.O.B. Shipping Point, subject to change without notice.

COPPER WIRED

Size	Per 1000 Plain	Per 1000 Painted
3 1/2 x 5/8 inch.....	\$3.30	\$4.10

POT LABELS

Size	Per 1000 Plain	Per 1000 Painted
4 x 5/8 inch.....	\$2.75	\$3.30
5 x 5/8 inch.....	3.00	3.60
6 x 5/8 inch.....	3.30	4.05
8 x 5/8 inch.....	4.80	6.00
10 x 5/8 inch.....	5.80	7.10
12 x 5/8 inch.....	6.80	8.40

The 4, 5 and 6 inch pot labels are packed in cartons of 1000 each and the 8, 10 and 12 inch in cartons of 500 each.

GARDEN STAKES

Size	Per 1000 Plain	Per 1000 Painted
8 x 7/8 inch.....	\$ 7.30	\$ 8.50
10 x 7/8 inch.....	8.30	9.60
12 x 1 1/8 inch.....	14.00	16.00

The 8 and 10 inch stakes are packed in cartons of 250 each, and the 12 inch stakes in cartons of 100 each.

INSECTICIDES

Soilene. 25 lbs., \$8.00; 50 lbs., \$15.00.

Apomite. 1 qt. can, \$3.50; 1 gal. can, \$11.00; 5 gal. can, \$50.00.

Detex. 1 qt. can, \$3.50; 1 gal. can, \$11.00; 5 gal. can, \$50.00.

"CARNATION PACK"

Pat. No. 2,247,191

1000	\$32.50	per 1000
5000	30.50	per 1000
10,000	28.50	per 1000
25,000	26.50	per 1000
50,000	25.75	per 1000

Write for prices on larger quantities.

Printing in one color on face of holder, \$3.75 per 1000 extra on all amounts up to 10,000. Printing free on 10,000 or more. Please state clearly name, address, etc. to be used. Prices F.O.B. Castorland, New York, and subject to change without notice.

CUPRINOL WOOD PRESERVATIVE

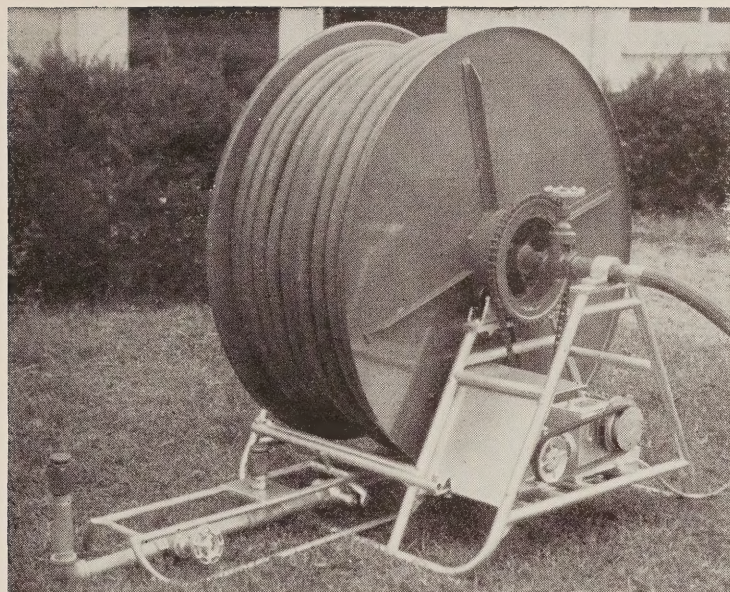
Green for Wood #10. 1 gallon, \$4.70; 5 gallons, \$4.40 per gallon; 50 gallons, \$4.20 per gallon.

For Florists #14. 5 gallons, \$2.85 per gallon; 50 gallons, \$2.65 per gallon.

Clear for Wood #20. \$4.70 per gallon; 5 gallons, \$4.40 per gallon; 50 gallons, \$4.20 per gallon.

Brown Stain #70. 1 gallon, \$4.70; 5 gallons, \$4.40 per gallon; 50 gallons, \$4.20 per gallon.

F.O.B. Shipping Point. Prices subject to change without notice.



Hoseboye

Do you spend more time watering than you can spare from all your other work?

Here is your chance to get your watering done right and still have more—yes, more—time to do the other chores that must be done.

HOSEBOYE

is an automatic, economical method of watering. You need only place this electric powered hose reel and sprinkler in position, turn it on, and go about your other tasks until two benches are watered. Then on to the next aisle.

For a complete description, see February '53 GROWER TALKS.

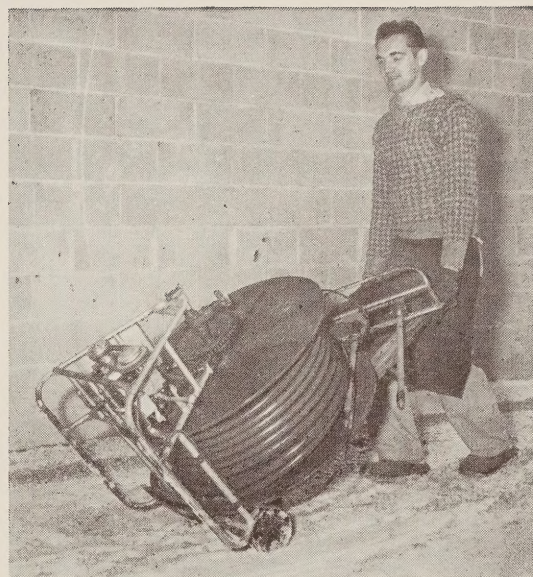
HOSEBOYE, complete with 150 ft. $\frac{3}{4}$ in. ID plastic hose, sled and 2 fan-type flat spray nozzles, **\$345.00**. F.O.B. Cincinnati.

Mfg. by Oldfield Equipment Co. and distributed exclusively by Geo. J. Ball, Inc.



ADAPTABLE!

Water 1 bench, 2 benches, or the whole house with fine mist or heavy spray, whichever is needed. Use for raised or ground beds.



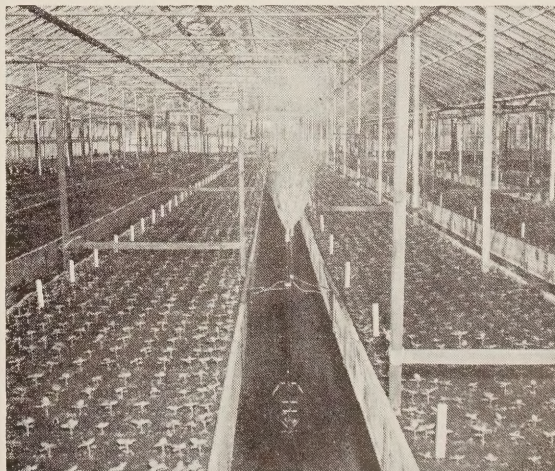
PORTABLE!

easily moved from one bench or house to another.



EASILY ADJUSTED!

You don't have to be a master mechanic to use it.



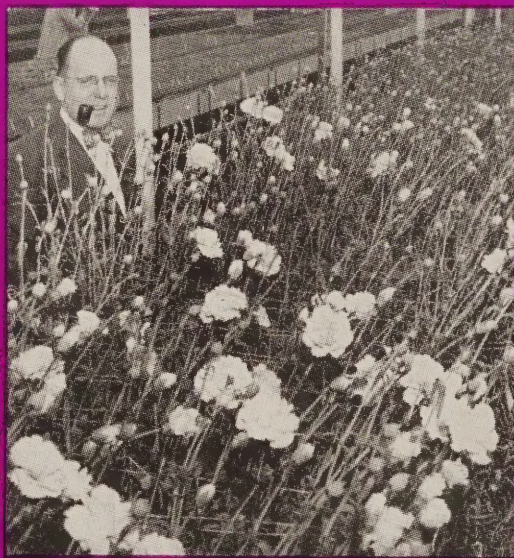
This Year

... you will find the plant and cutting offerings in the first 15 pages of the catalog.

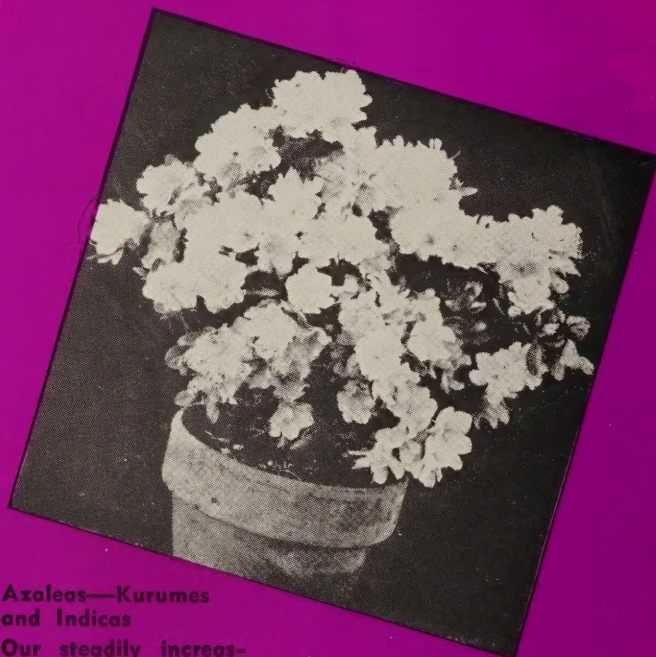
Some of the Roses offered are so new that at printing time prices had not been established. All inquiries will, of course, have our prompt attention.



Triomphe D'Orleans
One of the best Red Roses for
pot forcing—early.



Flowering trial of Carnations at our range.
This is Aurora (white) and
George K. Ball.



**Azaleas—Kurumes
and Indicas**
Our steadily increas-
ing sales point out the
growing popularity of this
beautiful plant.

Geo. J. Ball
I N C.
WEST CHICAGO
ILLINOIS